

# CHAIRMAN'S REVIEW

1968



# REVIEW BY THE CHAIRMAN, SIR GEORGE HARVIE-WATT, BART, T.D., D.L., O.C.

# AT THE ANNUAL GENERAL MEETING OF THE COMPANY ON 19TH NOVEMBER, 1968

Before my review of the year's events I should like to welcome three newcomers to the Board: Lord Erroll who joined us last December brings with him wide technical and ministerial experience; Mr. Young who has had a close association with us for many years through American Zinc, of which company he is Chairman and Chief Executive Officer, and Mr. Mackay, who joined Gold Fields in 1959 when we acquired New Union Goldfields. He has been Investment Manager in London since 1961.

We have also to say farewell to Mr. Cottell who was first appointed to the Gold Fields' Board in December, 1954. He was Chairman of Anglo-French Exploration Company which he joined in 1927, and which was acquired by Gold Fields in 1959. We will miss his wise counsel and broad experience.

After the temporary setback in profits last year the Group has once again moved strongly forward, resuming the growth in profits and assets which has been almost continuous over the last ten years.

Group profits before tax reached the record figure of £16.3 million. They were £5.1 million higher than in 1967.

All sources of revenue contributed to this year's excellent result. The devaluation of sterling admittedly played a part and it was responsible for one-third of the improvement. More important contributions were made by higher mining revenue and substantially larger share-dealing profits. The latter amounted to £4.7 million and it is significant that two-thirds of this sum was derived from Australian and North American investments.

Group profits, after deduction of taxation and minority interests, amounted to £9 million, an increase of £2.8 million or 45 per cent. compared with last year.

Dividends paid by the parent company have risen from £4.4 million to £4.9 million. This is due to the increased Ordinary capital following the rights issue in April, to the issue of shares for various acquisitions and to the 3 per cent. rise in the dividend rate for which Treasury sanction has been received.

There was an increase in fixed assets of £16 million to £52 million. This again was partly attributable to devaluation but mainly to the new acquisitions in the United Kingdom and capital expenditure in Australia and America.

The book value of investments rose by £13 million to £55 million. Of this total, £46 million was in quoted securities, the market value of which, at 30th June, 1968, was £197 million—£101 million higher than last year.

Total assets of the Group, including Stock Exchange values for quoted investments, amounted to £316 million. This is £141 million more than last year and nearly seven times the corresponding figure for the Group ten years ago.

It is interesting to note that, in the same period of ten years the issued Ordinary Share capital of the parent company has nearly trebled from £5.9 million to £17.2 million. Group profits before tax have risen nearly six times. In spite of more severe taxation and substantial retentions of profit for exploration and capital expenditure, ordinary dividends paid have risen from £1.4 million to £4.7 million and Gold Fields' market capitalization is now more than ten times higher than it was in June, 1958.

This has been a remarkable achievement.

We continue to consolidate the development of recent years. We have also embarked on important new projects which greatly strengthen the range of our interests both in the United Kingdom and overseas.

### SOUTH AFRICAN INTERESTS

Our activities in South Africa and, indeed, the Group figures which I have just quoted, have inevitably been overshadowed by the news of the recent massive inflow of water at West Driefontein. This mine is the richest gold producer in the world. Its milling rate and working profits have been raised successively in each of the past five years and further increases were forecast. It is all the more calamitous, therefore, that its operations should have been interrupted. Recovery from a disaster of this magnitude will take time but the information from Johannesburg indicates that the 85 million gallon per day inflow from No. 4 shaft area has now been isolated from the rest of the mine. This is most satisfactory.

We have all along had the greatest confidence in the direction of our South African Chairman, Mr. Adriaan Louw, and his highly experienced technical staff. They are to be congratulated on their magnificent work during the past few weeks. Everything that is possible is being done to combat the problems which are facing West Driefontein.

In the meantime we should not lose sight of the fact that the year has also brought significant advances in the long history of the Group's activities in South Africa. The first of these was in January when production started at the new Kloof gold mine—six months earlier than forecast. By the end of 1969 milling should reach a rate of 180,000 tons of ore a month and the first dividend is expected to be paid in June 1970.

The second event was the launching of the East Driefontein Gold Mining Company in May. Though underground development from West Driefontein's No. 4 shaft will be delayed by the recent flooding, the first stage of sinking the mine's own shafts is in progress and will continue as planned. There is every expectation that it will have a long and profitable life.

The establishment of Kloof and East Driefontein means that there are now eight gold mines on the West Wits line, of which six are administered by Gold Fields. The Group has substantial direct holdings in these mines as well as major indirect interests through West Witwatersrand Areas, which had an excellent year.

Nineteen sixty-eight has been an eventful year in the world gold and currency markets, and the immediate outlook suggests a further period of uncertainty. We consider that the role of gold as the ultimate backing for currencies and trade must persist. This, together with rising industrial needs for the metal should make our position in this field one of continuing strength.

The platinum investments of the Group at 30th June accounted for more than a quarter of the market value of all our quoted securities. The future also looks promising. During recent years the Rustenburg Company has ploughed back a large proportion of its profits and has built up its capacity by successive expansion programmes. The recent decision to raise production still further to one million ounces a year by the middle of 1970 will be financed out of loans and retained profits. World demand for producer-priced platinum continues buoyant and potential reductions in consumption by the oil industry should be offset by fresh applications in other directions. Rustenburg should be able to maintain its policy of steadily increasing dividends.

Our major interests in South Africa continue to be in gold and platinum but we have widened our scope for future growth by investment in industrial concerns and in base metals.

The Zinc Corporation of South Africa will start smelting early in 1969 and will provide that country with its first domestically-produced supplies of electrolytic zinc. A major part of the zinc concentrates is to be produced by Kiln Products Limited from the Berg Aukas mine of the South West Africa Company. Gold Fields has a substantial stake in all three companies and supplies them with management services.

Our investment in tin has been increased through the recent rights issue by Rooiberg Minerals, which is raising its annual production of tin in concentrates from 1,140 tons to 1,620 tons per annum over the next five years. Production is also being increased at the Greenside Colliery of Apex Mines and by Glenover Phosphates.

Since the close of the financial year we have decided to exploit our discovery of fluorspar deposits in the Northern Transvaal by establishing a mine at Zwartkloof. This will be equipped to produce 50,000 tons of acid-grade fluorspar per annum by the middle of 1970.

Notwithstanding the difficulties at West Driefontein, which I have just mentioned, it is encouraging at this time to consider how the Group's interests in South Africa have developed during the last ten years. Annual production from gold mines adminstered by Gold Fields of South Africa rose by nearly 70 per cent. to a record figure of 5.4 million ounces, in the year ended 30th June, representing 12 per cent. of free world output. Production of platinum by Rustenburg has increased fourfold over the same period. In addition to our growing direct stake in industry and base metals, our portfolio investments in South African companies outside the Group continue to supplement our income from that country.

In 1958, South Africa contributed £3.6 million, representing 80 per cent. of the Group's revenue. By 1968 the proportion had fallen to 52 per cent. as a result of our growth in other countries but this smaller share was, in itself, a revenue of £11.7 million, more than three times the figure ten years earlier.

# CONTINUED PROGRESS IN AUSTRALIA

In Australia the outstanding item of interest is the continuing progress which has been made at Mount Goldsworthy. During its second full year of operations over four million tons of iron ore were sold. A one-third share of its profits accrues to Consolidated Gold Fields Australia and amounted to £1·2 million, accounting for 23 per cent. of the total income of our Australian companies. New long-term sales have been arranged with the Japanese steel industry and will extend contracted deliveries up to 1979. Further expansion is being considered and in anticipation of this, enlarged crushing capacity is now being installed. Harbour facilities at Port Hedland will be more than adequate for the expected increases in shipments. This was convincingly demonstrated during August when our port equipment loaded five ships with a total of over 200,000 tons of iron ore in less than a week; a rate equivalent to 13·5 million tons a year.

Our Australian beach sands interests also had a very satisfactory year. Associated Minerals' production of rutile and zircon set another record, and pre-tax profits increased from £779,000 to £1·2 million. The new Stradbroke Island dredge, the largest of these units in Australia, was commissioned in April and further rationalization and enlargement of treatment plants is in hand to provide an annual capacity of up to 95,000 tons of both rutile and zircon. Additional forward orders have been obtained during the year, including in particular a substantial extension of the rutile contract with American Potash and Chemical Corporation.

At Mount Lyell the recent deep drilling and exploration programme has led to an increase in ore reserves of 150 per cent. to 42 million tons. As a result, a £14 million expansion scheme is to be undertaken to raise output from 15,000 tons to 25,000 tons of copper per annum. A contract on favourable terms has been made with the Mitsubishi Company of Japan for the sale of a large proportion of this higher production.

Mt. Lyell is also joining with E.Z. Industries Limited in the construction of a sulphuric acid plant at Burnie in Tasmania. This too will be the largest plant of its kind in Australia and will absorb all Mt. Lyell's annual production of pyrites.

Approximately half the finance necessary for these two schemes is to be provided from Mt. Lyell's own resources and from bank loans. The balance is being raised by means of a rights issue underwritten by Consolidated Gold Fields Australia.

Mt. Lyell is now 75 years old and the recent decisions give promise of at least another 25 years of profitable operations.

At the Renison tin mine the metallurgical difficulties affecting the recovery of tin from the Federal lode ore have not yet been resolved. Test work with a view to modifications to the plant is in progress, both at the mine and in the United Kingdom. Meanwhile, other lodes more amenable to treatment are also being mined and will provide sufficient ore for blending into the mill feed for several years.

Already this has helped to improve recovery from 40 per cent. to 60 per cent. of the tin content and operations are now at a profitable level.

At the Bellambi coal mine the successful performance of the longwall unit has done much to offset the special problems of the mine, to which I referred last year. Though most of these still remain, the general outlook is encouraging and a second seam is being developed in response to rising demand from Japan.

Largely as a result of the boom in Australian mining shares the pre-tax profits of Commonwealth Mining Investments more than doubled, rising from £560,000 to £1.25 million.

The acquisition of Commonwealth Mining Investments in 1961 was the first major step in our expansion in Australia. It was followed by our investment in Associated Minerals and Mt. Lyell and all three companies have since more than trebled their pre-tax profits.

Consolidated Gold Fields Australia has established itself as a major force in the mineral industry, and the extent of its success can be measured by the fact that its profits and market value are now considerably larger than those of the whole of Gold Fields ten years ago. In 1958 Gold Fields' profit before tax was £2.8 million; the corresponding figure for the Australian company in 1968 was £5.4 million.

Similarly in 1958 the market capitalization of Consolidated Gold Fields' Ordinary Shares was £16 million; at 30th June this year Consolidated Gold Fields Australia was valued at over £83 million.

# NORTH AMERICAN AFFAIRS

In the United States it has been another difficult year for our principal interest, American Zinc. Although the price of the metal was higher than expected and the company achieved a 14 per cent. increase in sales, a loss of £585,000 was made. The main reasons for the loss, which followed the previous year's strike, were high start-up costs and delays in achieving planned performance with new equipment. The outlook for the company's operations in the near future must still be regarded as uncertain, but there are a number of hopeful indications. While there continues to be some prospect of excess world zinc smelting capacity, it is possible that action by producers outside the United States may go some way to limit the impact on price. With the completion of the major capital expenditure programme American Zinc is confident that economies in operating costs can be expected.

Our American industrial company, Buell Engineering, increased its sales of dust-control equipment but profit margins were reduced as the result of intense competition. Nevertheless, orders in hand are at at a record level and reflect the company's achievements in the development and extension of its wide range of products.

In Canada, Newconex Holdings achieved record profits. Its 75 per cent. owned subsidiary, the Pacific Truck and Trailer Company of Vancouver also had a successful year and, now having moved to a new plant, proposes to enlarge its business both within Canada and overseas.

Meanwhile Newconex Exploration continues to participate in the extensive prospecting operations concentrated on the Coppermine River area of the North West Territories where interesting disclosures of copper ore have been made.

Although our operating interests in North America have not yet made the progress for which we had hoped, we remain convinced that the Group must still aim to increase its stake in that part of the world. In the meantime we have been able to build up a substantial investment portfolio and over the last ten years the total value of our American and Canadian assets has risen from £3 million to £56 million.

### EXPANSION IN THE U.K.

In the United Kingdom it has been a satisfactory year for our industrial and commercial companies. Alumasc, which supplies a major portion of the brewing industry's requirements of casks and associated equipment, is also diversifying successfully into the manufacture of other products. Ambuco is consolidating its position as a leading supplier of plant for industrial dust and fume collection, and the Tennant Group of companies showed record turnover and profits.

Exploration in the British Isles has continued. At Wheal Jane in Cornwall the feasibility studies which I referred to last year showed the necessity for further investigations of the extensive mineralisation and complex metallurgy of this potentially important tin mine. Additional testwork is now in progress and at this stage the outlook remains encouraging.

The most important event in this country, however, has been the strengthening of our position in the sand, gravel and quarrying industry.

Results from our first year with Greenwoods came up to expectations so far as the sand, gravel and concrete operations were concerned. Progress in other divisions of the company has been less satisfactory, but there should soon be marked improvements from re-organization and new equipment.

Greenwoods provided us with the entry we needed into the industry and confirmed our view that it offered considerable opportunities and encouragement for further investment. In consequence we have acquired in recent months a number of private companies whose business is closely allied to that of Greenwoods. Most important of all, however, has been the successful offer to acquire all the issued ordinary capital of Amalgamated Roadstone Corporation.

Amalgamated Roadstone is one of the leading companies in the industry and its operations extend throughout England and Wales. It owns more than 40 quarries as well as sand and gravel pits. It also has a number of precast and ready-mixed concrete plants. With substantial spare capacity, it is well equipped to meet increasing demand and to benefit from the essential and inevitable rise in national expenditure on road-building programmes. During the negotiations leading to the acquisition, the Chairman of the company forecast profit before tax in excess of £2 million for the financial year which ended on 31st October. Such profit will adequately service the investment made.

Our companies in this industry are now supplying about 15 million tons of products per annum. This represents some 10 per cent. of total demand in the United Kingdom for these construction materials.

With this major addition to its interests in the United Kingdom, the Group has taken a further step in the policy of diversification which was adopted some fifteen years ago. At that time the major part of our business was in gold mining in South Africa. The new policy was to broaden both the nature of our investments and their geographical spread. Much has already been achieved. We are now firmly established in Australasia, the United States, Canada and our own country as well as in South Africa. While gold is still an important source of our revenue substantial contributions are being made by our base metal and industrial interests. That our policy has been worth-while is confirmed by the figures which we report to you today and, in spite of the complexities of the political scene throughout the world, financial and economic restrictions and the mining disaster which has recently overtaken us, we are confident that with our wide background we can look forward with some encouragement to the future.

You will appreciate that this year has been a particularly demanding one with a corresponding pressure on all our staff. I am sure that you would wish me on your behalf to express to the management and to all personnel, both here in the United Kingdom and in our companies overseas, our gratitude and warm thanks for their valuable contribution.

The Report and Accounts were adopted, the final Ordinary Dividend was approved and the Resolutions for the re-election of Directors, increase in capital and in the maximum number of Directors were passed. At the subsequent Extraordinary General Meeting and Class Meetings of Preference Shareholders, a Scheme of Arrangement relating to the Preference Share Capital was approved.







# Consolidated Gold Fields Limited

81st ANNUAL REPORT 1968



# Consolidated Gold Fields Limited

(INCORPORATED IN THE UNITED KINGDOM)

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# **Directors**

# SIR GEORGE HARVIE-WATT, BART., T.D., D.L., Q.C., Chairman

G. G. POTIER, D.F.C., Joint Deputy-Chairmen
J. D. McCALL

W. J. BUSSCHAU

F. R. COTTELL

SIR CHARLES DENMAN, BART., M.C.

The Rt. Hon. LORD ERROLL OF HALE, P.C.

A. LOUW

H. A. MACKAY

M. MACLACHLAN

J. B. MASSY-GREENE

G. J. MORTIMER, M.B.E.

M. E. RICH

W. MASON SMITH

SIR RICHARD SNEDDEN, c.v.o., c.b.e.

A. R. O. WILLIAMS, O.B.E.

R. A. YOUNG

# **HONORARY PRESIDENT**

ROBERT ANNAN

# **SECRETARY**

C. L. WATERHOUSE, F.C.A.

# REGISTERED OFFICE

49 MOORGATE, LONDON, E.C.2

# Group Offices Overseas

AUSTRALIA Consolidated Gold Fields Australia Limited

Gold Fields House, Sydney Cove, Sydney

Chairman: J. B. Massy-Greene

CANADA Newconex Holdings Limited

P.O. Box 40, Toronto-Dominion Centre, Toronto 1, Ontario

President: W. A. Robinson, D.S.O.

SOUTH AFRICA Gold Fields of South Africa Limited

75 Fox Street, Johannesburg

Chairman: A. Louw

UNITED STATES OF AMERICA Gold Fields American Corporation

Bankers Trust Building, 280 Park Avenue, New York 17

President: J. H. Nicholls

# Notice of Annual General Meeting

NOTICE IS HEREBY GIVEN that the Annual General Meeting of Consolidated Gold Fields Limited will be held at The Chartered Insurance Institute, 20 Aldermanbury, London, E.C.2, on Tuesday, the 19th day of November, 1968, at 11.30 a.m., to receive the report of the Directors and the Accounts for the year ended 30th June, 1968, and the report of the Auditors thereon, to determine the remuneration of the Auditors, and to resolve upon the following:—

As ordinary business:-

- 1. That a final dividend of 10d. per share, less tax, be declared on the Ordinary Shares.
- 2. That the following be re-elected Directors of the Company:—
  - (a) The Rt. Hon. Lord Erroll of Hale, P.C.
  - (b) Mr. R. A. Young
  - (c) Mr. H. A. Mackay
  - (d) Dr. W. J. Busschau
  - (e) Mr. M. Maclachlan
  - (f) Sir Richard Snedden, c.v.o., c.B.E.

As special business, to consider and, if thought fit, pass the following Resolutions as Ordinary Resolutions:-

- 3. "That the capital of the Company be increased from £23,000,000 to £25,000,000 by the creation of 8,000,000 Ordinary Shares of 5s. 0d. each."
- 4. "That the maximum number of Directors be increased from eighteen to twenty-four."

By Order of the Board, C. L. WATERHOUSE,

Secretary.

49 Moorgate, London, E.C.2 26th October, 1968.

# NOTES

Holders of Ordinary Shares, who alone are entitled to attend and vote at the Meeting, may appoint one or more proxies to attend and vote on their behalf. A proxy need not be a Member of the Company.

For the convenience of Ordinary Shareholders who may be unable to attend the Meeting, a form of proxy is enclosed which should be completed and returned so as to reach the Company not less than forty-eight hours before the time fixed for the Meeting. The fact that Ordinary Shareholders may have completed forms of proxy will not prevent them from attending and voting in person should they afterwards decide to do so.

Holders of Ordinary Share Warrants to Bearer who wish to be present or represented at the Meeting may obtain the necessary information regarding the formalities to be complied with and forms of proxy from the Registered Office of the Company.

The following documents will be available for inspection at the Registered Office of the Company during usual business hours on any weekday (Saturdays excluded) and at The Chartered Insurance Institute, 20 Aldermanbury, London, E.C.2, on 19th November, 1968, from 11.15 a.m. until the conclusion of the Annual General Meeting:—

- (i) a statement of the transactions of each Director, including family interests, in the equity share capital of the Company and its subsidiaries during the twelve months to 30th September, 1968;
- (ii) copies of contracts of service between the Directors and the Company or any of its subsidiaries.

# Report of the Directors

The Directors present their Report and the audited accounts for the year ended 30th June, 1968. The Group Profit and Loss Account, the Group Balance Sheet and the parent company's Balance Sheet are shown on pages 10 to 15, salient features from the accounts are set out on page 9, and an analysis of the Group's turnover and profits appears on page 39. A summary of the Group's financial results for the past 10 years is on pages 42 and 43.

# **GROUP PROFIT AND LOSS ACCOUNT**

Group revenue for the year amounted to £22.6 million. The sources from which it arose are shown in the tabulation which appears on page 41.

Devaluation of sterling in November, 1967, had a significant impact on the Group's earnings. No part of the profits earned by overseas subsidiaries in respect of the year under review was remitted to the United Kingdom prior to devaluation and the whole of such profits has therefore been converted into sterling at the rates of exchange ruling on 30th June, 1968.

After deducting expenses and the interest on debentures and Ioans, the profit of the Group before taxation was £16.3 million compared with the previous year's figure of £11.2 million. Of the increase of £5.1 million it is estimated that £1.8 million was attributable to devaluation.

In addition to devaluation, an important factor contributing to the improvement in results was a substantial increase in profits on realisation of investments to £4.7 million from £2.6 million in the previous year. World markets for mining shares were exceptionally favourable and good conditions were encountered in those industrial equity markets in which the Company operates. Approximately two-thirds of Group share dealing profits were derived from Australian and North American stocks.

The net revenue from mining companies also rose materially by £1.9 million to £4.4 million. Of this increase, Mount Goldsworthy, the Western Australian iron ore mine in which the Group has a one-third interest, contributed £786,000. Among other significant reasons for the increase was the inclusion, for the first time, of profits from the sand and gravel production of the Greenwoods (St. Ives) group.

The taxation charge has risen proportionately to the higher Group profits, increasing from £3.6 million to £5.0 million after taking credit for overprovisions of £440,000 in previous years.

The net profit attributable to the shareholders of the Company, after deducting taxation and the interests of outside shareholders, increased by £2.8 million to £9.0 million.

The sum of £4.1 million has been transferred to reserves and £4.9 million is required to meet the cost of dividends. The balance of unappropriated profits carried forward is £2.3 million.

# **GROUP BALANCE SHEET**

# **Authorised Capital**

On 21st November, 1967, the Authorised Capital was increased to £23,000,000 by the creation of 3,000,000 Ordinary Shares of £1 each. Subsequently, on 1st January, 1968, each Ordinary Share of £1 was sub-divided into four shares of 5s. each. All further references in this Report to the Ordinary Shares of the Company are in terms of shares of 5s. each unless otherwise stated.

# Capital Employed

During the year the issued capital of the Company increased by 10,383,078 Ordinary Shares. The acquisition of the ordinary share capital of Greenwoods (St. Ives) Limited accounted for 4,695,484 of

these shares and 5,687,594 shares resulted from a rights issue made at 45s. per share in April, 1968, to the holders of Ordinary Shares.

The purpose of the rights issue was to strengthen the Company's financial position and provide funds for the expansion of the Group's interests both at home and overseas. In particular, substantial funds were required to finance the Group's large direct and indirect participation in East Driefontein Gold Mining Company Limited, the new South African gold mine.

The reserves of the Group not available for distribution increased by £17.3 million to £31.7 million, due mainly to the premium of £16.9 million arising on the shares issued during the year.

An appropriation of £1.5 million was made to General Reserve and, after allowing for differences in exchange rates, this Reserve increased by £1.7 million to £13.3 million.

An amount of £2.6 million was transferred to Investment and Exploration Reserve. The amount charged against this Reserve in respect of exploration expenditure and adjustments in value of certain investments was £1.1 million. After other minor adjustments, and taking into account movements in exchange rates, the Reserve increased to £4.5 million. Total reserves arising from profit retentions at 30th June, 1968, were £20.2 million.

Loan capital of the Group amounted to £36.1 million having risen by £9.6 million during the year. The effect of devaluation on sterling equivalents of loans in other currencies accounted for £3.0 million. Of the remainder £2.3 million represented the borrowings of newly acquired subsidiaries and £4.3 million was attributable to net additional borrowings by other Group companies.

The increase of £7.4 million in the interest of outside shareholders in the Capital and Reserves of subsidiary companies was brought about by a number of factors including the acquisition of new subsidiaries, devaluation of sterling and retention of profits.

### Assets

During the year fixed assets, before depreciation, rose by £22.3 million to £77.8 million. Of this increase £8.5 million resulted from movements in exchange rates. Companies joining the Group, particularly Greenwoods (St. Ives) Limited, contributed a further £8.5 million and net capital expenditure by Group companies, mainly those in Australia, accounted for most of the balance of £5.3 million.

The nature of the Group's activities is such that no realistic assessment can be made of the market value of property held for mining purposes. Estimates have been made in respect of the Group's other properties but the excess of their market value over book value is not regarded as significant in relation to the total value of Group assets.

Investments are included at or under cost, but in no case above Stock Exchange values, and amounted to £55 million in total compared with £42 million in 1967. The increase of £13 million relates mainly to additional portfolio investment including the following of rights by Group companies in the issue made by West Witwatersrand Areas Limited. At 30th June, 1968, the Stock Exchange value of the quoted portfolio was £197 million compared with £96 million last year. Half of this increase was in gold mining investments and one-third in platinum in which the Group's investment was valued at £53.2 million at the end of the year.

The excess of current assets over current liabilities amounted to £31.3 million. The increase of £12.8 million was mainly attributable to the rights issue made by the Company in April, 1968.

Group assets at 30th June, 1968, including Stock Exchange values for quoted investments, but excluding special export finance debtors, amounted to £316 million. The percentage distribution of these assets in various areas of the world is shown in the tabulation which appears on page 41.

# **ACQUISITIONS**

Since the end of the financial year there has been a considerable expansion in the Group's operations in the sand, gravel and quarrying field in the United Kingdom. Apart from the acquisition of a number of privately owned companies for a consideration of 699,471 Ordinary Shares, the Company has made a successful offer to acquire control of Amalgamated Roadstone Corporation Limited. At 4th October, 1968, acceptances totalling 93 per cent. of the issued ordinary share capital of that company had been received. The offer was declared unconditional and was extended. Full acceptance of the offer will require the issue of 8,061,808 Ordinary Shares in Gold Fields together with £6,046,356 of  $8\frac{1}{4}$  per cent. Unsecured Loan Stock. Arrangements were also made whereby shareholders of Amalgamated Roadstone Corporation who accepted the offer could dispose of part or all of their entitlement of Gold Fields shares for cash at 70s. per share. The Gold Fields shares to be issued under the offer will not rank for the final dividend for the year to 30th June, 1968.

The principal business of the Amalgamated Roadstone group is the quarrying and processing of stone of all types for roadmaking, building and other industries. It operates some forty quarries, four gravel pits and a number of plants manufacturing concrete products and ready-mixed concrete. The group also includes shipping and engineering subsidiaries.

The above acquisitions are not reflected in the Group Accounts at 30th June, 1968.

### **CAPITAL**

As referred to above, full acceptance of the offer to Amalgamated Roadstone shareholders will result in the issue of 8,061,808 Ordinary Shares in Gold Fields. The effect of this on the share capital of the Company would be as follows:—

Authorised	Share Capital			Issued
£			_	£
1,750,000	7 per cent. First Cumulative Preference Shares of £1 each	• • •	• • •	1,750,000
1,250,000	7 per cent. Second Cumulative Preference Shares of £1 each			1,250,000
20,000,000	80,000,000 Ordinary Shares of 5s. each (77,644,357 issued)	•••	• • •	19,411,089
£23,000,000				£22,411,089

The above figures are dependent upon the outcome of a Scheme of Arrangement in regard to Preference Shares which is to be considered at an Extraordinary General Meeting of the Company, and at Class Meetings, to be held immediately following the Annual General Meeting. Details of the proposed scheme are set out in a circular accompanying this Report.

The Directors consider that an adequate number of shares should be held in reserve to meet the Company's future needs. Accordingly, as recent issues have reduced the margin available, a Resolution will be submitted at the Annual General Meeting to increase the Authorised Capital to £25,000,000 by the creation of 8,000,000 Ordinary Shares of 5s. each. At the present time the Directors have no proposals for the issue of any share capital which will remain unissued after giving effect to the proposals already referred to. Furthermore, without the prior approval of Shareholders in General Meeting, no part of the unissued capital will be issued in such a manner as to affect materially the control of the Company or to lead to a radical change in the nature of its business.

# DIVIDENDS

The Directors recommend a final dividend of 10d. per 5s. Ordinary Share which, with the interim dividend of 7d. per share paid on 22nd May, 1968, makes a total of 1s. 5d. for the year on the Ordinary

Share Capital. This is equivalent to 5s. 8d. in terms of the former shares of £1 each and compares with a total dividend of 5s. 6d. paid last year. The increase in dividend has received the consent of the Treasury. If the dividend is approved at the Annual General Meeting it will be paid on 3rd December, 1968, to holders of Ordinary Shares registered in the books of the Company on 25th October, 1968, and to holders of Coupon No. 101 detached from Share Warrants to Bearer for Ordinary Shares.

### **INTERESTS**

The Company's principal activities cover mining finance, investment, exploration and development, the promotion of mining and industrial companies and the management and administration of subsidiary and associated companies.

A list of the principal subsidiary companies, and of Group interests where the equity interest exceeds 10 per cent., showing their respective activities, appears on pages 36 and 37. Particulars of other Group interests are shown on page 38. Comments on Group operations are given on page 22 and following pages.

# **DIRECTORS**

The Rt. Hon. Lord Erroll of Hale, Mr. R. A. Young and Mr. H. A. Mackay, who were appointed to the Board on 21st December, 1967, and 21st March and 23rd May, 1968, respectively, retire under the Articles of Association and offer themselves for re-election. Mr. Young is Chairman and chief executive officer of American Zinc Company. Mr. Mackay has been Investment Manager on the London Staff of the Company since 1961.

Mr. F. R. Cottell, who joined the Board in 1954, retires at the forthcoming Annual General Meeting having reached the age of 70, but does not seek re-election. The Board records its appreciation of the contribution made by Mr. Cottell to the Company's affairs during his period in office and particularly for his executive services with Group companies.

Dr. W. J. Busschau, Mr. M. Maclachlan and Sir Richard Snedden retire by rotation and offer themselves for re-election.

In view of the increasing range of the Company's activities, both at home and overseas, a Resolution will be submitted at the Annual General Meeting to increase, from 18 to 24, the maximum number of Directors permitted by the Articles of Association, to enable additional Directors to be appointed as and when circumstances may render this desirable.

# STAFF

The Directors wish to record their appreciation of the services rendered by all officers and employees of the Group, both at home and overseas.

They also welcome to the Group the staffs of Amalgamated Roadstone Corporation Limited and of other newly acquired subsidiary companies.

### **AUDITORS**

Messrs. Turquand, Youngs & Co., Chartered Accountants, have signified their willingness to continue in office as Auditors.

# **ADDITIONAL INFORMATION**

Additional information relating to Directors' interests, employees, exports, turnover and subscriptions and donations is given on pages 39 to 41 which are deemed to be part of this Report.

By Order of the Board, C. L. WATERHOUSE, Secretary.

49 Moorgate, London, E.C.2 26th October, 1968.

# Salient Features

# FROM THE ACCOUNTS OF THE GROUP

	1968	1967	1966
	£'000	£'000	£'000
Group Operating Profit	16,348	11,231	12,605
Taxation	5,020	3,621	3,674
Net Profit for the Year	9,033	6,238	7,242
Ordinary Dividends	4,742	4,216	3,712
per 5s. 0d. share .	1s. 5d.	1s. $4\frac{1}{2}d$ .	1s. $4\frac{1}{2}d$ .
Shareholders' Funds	72,200	48,600	40,900
Capital Employed	133,500	92,900	76,700
Fixed Assets	52,300	36,200	28,400
Net Current Assets	31,200	18,500	13,600
Quoted Investments			
at Book Value	46,700	35,800	31,500
at Stock Exchange Value	197,100	96,300	89,500

# Group Profit and Loss Account

for the year ended 30th JUNE, 1968

£'000	67 £'000		£'000	₹,000
6,738		Dividends and Interest on Investments (Note 10)	•	7,778
2,680		Profit on Realisation of Investments		4,701
		Net Revenue of:		
	1,527	Industrial and Commercial Companies	2,062	
4,074	2,547	Mining Companies	4,449	6,511
		Administration and Technical Fees received, Commission and		
2,924		Sundry Revenue		3,671
16,416	3,590	Less: Administration, Technical and General Expenses	4,301	22,661
5,185	1,595	Interest payable on Debentures and Loans (Note 11)	2,012	6,313
11,231		Profit before Taxation (Note 15)		16,348
3,621		Taxation (Note 16)		5,020
7,610		Net Profit for the Year		11,328
1,372		Proportion attributable to Outside Shareholders		2,295
		Net Profit for the Year attributable to the Shareholders of		
6,238		Consolidated Gold Fields Limited, carried forward		9,033

# CONSOLIDATED GOLD FIELDS LIMITED

# AND SUBSIDIARY COMPANIES

1967 £'000 £'000	£'(	000 £'000
6,238	Net Profit for the Year attributable to the Shareholders of Consolidated Gold Fields Limited, brought forward .	9,033
1,654	Unappropriated Profits brought forward (Note 18)	2,371
7,892	Total available for Appropriation	11,404
	Appropriations:	
1,000	General Reserve	500
589 1,589 ——	Investment and Exploration Reserve	650 — 4,150
6,303		7,254
	Dividends paid and recommended by Consolidated Gold Fields Limited—Gross:	
210	Preference—7% per annum	210
1,646	Ordinary—interim dividend of 7d. per share  (paid 22nd May, 1968)	843
2,570 4,426 ——	final dividend of 10d, per share now recommended	899 — 4,952
1,877	Unappropriated Profits carried forward	2,302

# Group Balance Sheet 30th June, 1968

£'000 £'000		£,000	£'000
14,625 1,750 1,250	Capital:  Issued and Fully Paid—  68,883,078 Ordinary Shares of 5s. 0d. each	17,221 1,750 1,250	20,221
14,467	Reserves: (Note 1)  Not available for distribution	31,758	
11,675 3,006 1,877 31,025 48,650	Profits retained: General Reserve	13,361 4,572 2,302	51,993 72,214
26,581	Debentures and Loans: (Note 2)		36,115
7,714	Outside Shareholders' Interest in Capital and Reserves of Subsidiary Companies		25,188
3,275 386 277 3,938 ——	Deferred Liabilities and Provisions:  Taxation (Note 5)	4,265 714 269	5,248
13,422 1,444 12,106 2,570	Current Liabilities: Creditors Taxation, including United Kingdom Corporation Tax payable 1st January, 1969 Bank Overdrafts Proposed final Ordinary Dividend—gross	22,518 1,960 13,037 2,899	40,414
26,425			179,179

# CONSOLIDATED GOLD FIELDS LIMITED

# AND SUBSIDIARY COMPANIES

£'000	£'000 £'000		£'000	£,000
36,264		Fixed Assets: (Note 6)		52,377
		Investments: (Note 7)		
	35,852	Quoted	46,782	
		Stock Exchange value: £197,164,000 (£96,346,000)		
	5,230	Unquoted	6,983	
42,085	1,003	Properties and Ventures	1,329	55,094
		Current Assets:		
		Stocks and Work in Progress at lower of cost or realisable		
	13,285	value	15,565	
	24,490	Debtors and Dividends Declared	32,080	
48,076	10,301	Cash at Bankers, Deposits, Short Term Loans and Treasury Bills	24,063	71,708

126,425

179,179

# Balance Sheet 30th June, 1968

1967 £'000 £'000		£'000	£'000
	Capital:		
	Authorised—		
17,000 1,750 1,250	80,000,000 Ordinary Shares of 5s. 0d. each	20,000 1,750 1,250	
20,000		23,000	
20,000			
	Issued and Fully Paid—		
14,625 1,750 1,250 7,625	68,883,078 Ordinary Shares of 5s. 0d. each	17,221 1,750 1,250	20,221
	Reserves: (Note 1)		
21,438	Share Premium	38,404	
	Profits retained:		
3,250 1,529 614	General Reserve	3,250 1,500 593	
5,831 ——			43,747
1,456			63,968
1,429	Unsecured Loans: (Note 2)		14,167
	Provision:		
17	Pensions		17
	Current Liabilities:		
92 539 45	Deposits by Associated Companies	1,572 625 239	
2,570	Proposed final Ordinary Dividend—gross	2,899	E 225
3,246 —			5,335
9,148			83,487

# CONSOLIDATED GOLD FIELDS LIMITED

£'000	67 £'000		£,000	£',000
333		Fixed Assets: (Note 6)		350
		Investments: (Note 7)		
	14,226	Quoted	17,410	
	163	Unquoted	153	
14,563	174	Properties and Ventures	308	17,871
		Subsidiary Companies:		
	32,133	Shares at Cost less amounts written off	40,556	
	8,711	Advances less Provisions	8,699	
	40,844		49,255	
40,798	46	Less: Amounts Due	129	49,126
		Current Assets:		
	1,293	Debtors and Dividends Declared	1,995	
3,454	2,161	Cash at Bankers and Short Term Deposits	14,145	16,140

G. S. HARVIE-WATT,
G. G. POTIER,

Directors.

59,148

83,487

# Notes to the Accounts

# 1. RESERVES:

# (a) Not available for distribution:

In arriving at the figure in the Group Balance Sheet, the excess of the cost of shares in subsidiary companies over the book value of their net assets at the dates of acquisition (less other non-distributable group reserves) has been deducted as shown in column (2) below:

Balance at 1st July, 1967	ss . 16,966 es k	Deductions (2) £³000 6,971	As shown in Group Balance Sheet (3) £3000 14,467
value of their net assets at the dates o acquisition	•	4,360 (4,272)	
Adjustments arising from variations in shareholdings in subsidiaries	n	118	
Adjustments by subsidiaries, includir amounts written off	ng	(531)	
Balance at 30th June, 1968	38,404	6,646	31,758
			Investment and

		Investment and
(b) Profits retained:	General Reserve	Exploration Reserve
	Parent Group	Parent Group
	£'000 £'000	£'000 £'000
Balance at 1st July, 1967	3,250 11,675	1,529 3,006
Add: Arising from alterations in exchange rates	(555) 192	
Transfer from Profit and Loss Account	555 1,500	147 2,650
	3,250 13,367	1,676 5,674
Less: Written off investments		322
Exploration expenditure written off		176 779
Transfer to outside shareholders' interest	<del>-</del> 6	1
Balance at 30th June, 1968	3,250 13,361	1,500 4,572

Under a loan agreement between the Company and a consortium of American banks, the aggregate amount of dividends payable by the Company in respect of any one financial period is limited to the net group profit available to the Shareholders for that period.

2.	DEBENTURES AND LOANS:	Pa	rent	Group				
		1968 £'000	1967 £'000	1968 £'000	1967 £'000			
	Secured:  7½% Guaranteed Debenture Stock 1980/85  Bank Loans  Other Debentures and Loans:	=	=	4,619 362	4,694 451			
	repayable either wholly or in part more than five years hence	= .		867 166	716 66			
		_		6,014	5,927			
	Unsecured: Bank Loans Other Debentures and Loans:	13,000	10,429	26,218	19,221			
	repayable either wholly or in part more than five years hence	 1,167	1,000	2,421 1,462	374 1,059			
	Territorial analysis:	14,167	11,429	36,115	26,581			
	United Kingdom North America South Africa Australasia	5,500 7,500 1,167	4,000 6,429 1,000	13,698 18,783 3,022 612	8,694 15,280 1,951 656			
		14,167	11,429	36,115	26,581			

The interest rates on "Other Debentures and Loans" included above, at 30th June, 1968, ranged from nil to  $8\frac{1}{2}\%$  p.a. and repayments are due at varying dates up to 1992.

# 3. SECURED LIABILITIES:

No liabilities of the Parent Company are secured and those of the Group are secured to the following extent:

														£'000	£'000
Debentures and Loans (see Note 2)	) .													6,014	5,927
Purchase of Mining Properties														10	26
Creditors												•		906	988
Bank Overdrafts		•	٠	•	•	•	•	•	٠	•	•	٠	•	12,087	9,968
														40.04	16000
														19,017	16,909

### 4. BORROWING POWERS:

6.

Included in Secured Liabilities (see Note 3) are borrowings by the Tennant group of companies to provide export finance facilities for United Kingdom industry. To the extent that such borrowings are secured by a British Government Department they are not required to be taken into account when determining the limitation placed by the Company's Articles upon the borrowing powers of the Group. At 30th June, 1968, the total amount to be thus excluded was £10 million (£8.9 million).

# 5. DEFERRED LIABILITIES AND PROVISIONS:

The item "Taxation" includes £2,910,000 (£2,407,000) set aside by group companies for the purpose of avoiding undue fluctuations in taxation charges and £1,124,000 (£676,000) in respect of United Kingdom Corporation Tax payable 1st January, 1970.

FIXED ASSETS:	Parent	Group										
Cost or Valuation:	Total £'000	Property £'000	Mining Leases and Development £'000	Plant and Machinery £'000	Total							
At 1st July, 1967	521 53 1	13,357 3,276 2,881 1,930	6,210 26 707 226 1,023	35,988 5,274 6,229 - 5,563	55,555 8,576 9,817 226 8,516							
Less: Disposals	575 2	21,444	8,192 678	53,054 3,787	82,690 4,807							
At 30th June, 1968	573	21,102	7,514	49,267	77,883							
Depreciation: At 1st July, 1967	188 —	3,864 608	1,467 —	13,960 2,536	19,291 3,144							
(1967: Group £2,847,000) Exchange adjustments	36	480 603	352 234	3,418 2,081	4,250 2,918							
Less: On disposals	224 1	5,555 107	2,053 622	21,995 3,368	29,603 4,097							
At 30th June, 1968	223	5,448	1,431	18,627	25,506							
Net Balance Sheet Value	350	15,654	6,083	30,640	52,377							
United Kingdom Investment Grants received.  The Property of the Group comprised the		en applied agair	nst the cost of the	e fixed assets.								
Cost or Valuation: Freehold	xpired			1968 £'000 19,749 109 1,244	1967 £'000 12,112 107 1,138							
				21,102	13,357							
At 30th June, 1968, the fixed assets of the At cost		fore deducting	depreciation, wer	e made up as fo £'000	llows: £'000 76,987							
By reference to valuations in the follow 1956	ing years:			437 323 81 55	896							

77,883

### 7. INVESTMENTS:

Quoted investments are included at or under cost but in no case above the Stock Exchange value at 30th June, 1968. The Directors have considered it desirable to retain the book value of certain holdings below both cost and Stock Exchange values. Unquoted investments, valued by the Directors this year at £858,000 in the case of the Parent Company and £8,255,000 (£5,270,000) for the Group, and Properties and Ventures are included at cost less amounts written off.

The book value of investments quoted outside the United Kingdom was:

Parent £1,236,000 (£444,000). Group £16,614,000 (£12,756,000).

Of the surplus of the Stock Exchange value of the quoted investments over their book value as shown in the Group Balance Sheet, £5,114,000 (£1,397,000) is attributable to the outside shareholders in subsidiary companies.

Amounts written off investments by the Parent Company have been charged to Investment and Exploration Reserve. In the case of the Group investments, in addition to the amount charged to Group Investment and Exploration Reserve (see Note 1(b)), £186,000 (£94,000) has been charged to outside shareholders' interest.

8.	CONTINGENT LIABILITIES:	<u> </u>										
			rent	Gre								
		1968 £'000	1967 £'000	1968 £'000	1967 £'000							
	Guarantees: in respect of borrowings by subsidiary companies	5,452	4,694									
	other	60	60	148	151							
	Obligations to associated company, including those under contract, underwriting, uncalled capital on investments,											
	etc	2,162	3	10,308	6,417							
		7,674	4,757	10,456	6,568							
9.	CAPITAL COMMITMENTS:											
		Par		<b>Gr</b> 1968	oup							
		1968 £'000	1967 £'000	£'000	1967 £'000							
	Contracts for capital expenditure not provided for	55	6	2,489	3,484							
	Capital expenditure approved by the boards of the companies concerned, but for which contracts had not been	33	Ŭ	2,207	2,							
	placed	215	_	1,141	1,170							
		270	. 6	3,630	4,654							
			_									
10.	DIVIDENDS AND INTEREST ON INVESTMENTS:  The Group income from this source was divided as between Quoted Investments	en:	: : : :	1968 £'000 7,330 . 448 	1967 £'000 6,459 279 6,738							
11.	INTEREST PAYABLE:											
	The Group charge for the year comprised interest on:			1968 £'000	1967 £'000							
	(a) Debentures and Loans:			₹ 000	₺ 000							
	Bank Loans			1,399	1,110							
	Other Debentures and Loans: repayable wholly within five years other			89 524	67 418							
	Per Group Profit and Loss Account			2,012	1,595							
	(h) Ronk Overdrofte			-								

(b) Bank Overdrafts: Interest payable by the Group on bank overdrafts amounted to £1,007,000 (£699,000), including £684,000 (£589,000) by the Tennant group of companies.

# 12. DIRECTORS' EMOLUMENTS:

The total emoluments of the Directors of the Parent Company comprised:

		1968 £'000	1967 £'000
Fees, including £35,000 (£34,000) paid by subsidiary companies Executive remuneration, including £68,000 (£48,000) paid by subsidiary companies	•	51 271	50 238
		322	288

The emoluments (other than pension contributions) of those Directors whose duties were wholly or mainly discharged in the United Kingdom, including those of the Chairman which amounted to £60,810 (£61,650), were as indicated below:

																Number of	f Directors
Not exceeding $£2,500$																4	2
Between £2,500 and £5,000																$\bar{2}$	3
,, £5,000 ,, £7,500										•						_	1
,, £10,000 ,, £12,500																1	1
,, £12,500 ,, £15,000										۰					٠	2	1
,, £17,500 ,, £20,000				•			•			٠			٠			1	1
,, £27,500 ,, £30,000		•			•	•	•	•	•		٠	٠				, 1	1
" £60,000 " £62,500	٠	•	٠	٠			•					•				1	1
																12	11

Pensions paid in respect of past executive services amounted to £8,000 (£8,000).

# 13. AUDITORS' REMUNERATION:

The Group charge for the year amounted to £99,000 (£58,000).

### 14. HIRE OF PLANT AND MACHINERY:

The charge to Group revenue for the year was £257,000 (£69,000).

# 15. GROUP PROFIT BEFORE TAXATION:

The profit for the year includes £556,000 (£138,000) recovered in respect of amounts previously written off which, under the provisions of the Companies Acts 1948 and 1967, is regarded as drawn from Reserves.

### 16. TAXATION:

The Group charge comprised:

	1	.968	1967			
	£'000	£'000	£'000	£'000		
Overseas Taxation		4,509		3,087		
Corporation Tax at $42\frac{1}{2}\%$ (1967: 40%)	 1,126		711			
Income $Tax$	 _		58			
		1,126		769		
		5,635		<i>3</i> ,856		
Less: Overspill Relief	 172		172			
Provisions no longer required	 443		63			
2 20 7 2010 110 110 110 110 110 110 110 110 11		615		235		
		5,020		3,621		

The United Kingdom tax charge shown above is after deducting relief in respect of double taxation amounting to £2,667,000 (£2,196,000).

Additional taxation would arise in the event of:

(a) Distribution of profits from certain subsidiary companies abroad.

(b) Disposal of investments at the valuations stated.

The close company provisions of the Finance Act, 1965, do not apply to the Company.

# 17. PARENT COMPANY'S PROFIT:

Of the profit of £9,033,000 (£6,238,000) attributable to the Shareholders of Consolidated Gold Fields Limited £5,610,000 (£4,367,000) has been dealt with in the accounts of that Company.

# 18. GROUP UNAPPROPRIATED PROFITS BROUGHT FORWARD:

This item has been increased by £494,000, representing £486,000 arising on the undistributed profits of overseas subsidiaries due to alterations in exchange rates, and £8,000 resulting from variation in the interests in subsidiary companies during the year.

### 19. CURRENCIES:

- (a) United States and Canadian currencies have been converted into sterling at \$2.40 and \$2.595 to the £ respectively, with the exception of investment dollars, which have been converted at the premium rate ruling at 30th June, 1968.
- (b) All other currencies have been converted at the rates ruling at 30th June, 1968.

Where applicable, the Stock Exchange value of the quoted investments takes into account the investment dollar premium.

### 20. ADDITIONAL INFORMATION:

Additional statutory information in compliance with the Companies Act, 1967, will be found as follows:

Principal subsidiary companies and principal interests of the Parent Company—included with the information on pages 36 and 37.

Turnover—page 39.

# Report of the Auditors

TO THE MEMBERS OF

# CONSOLIDATED GOLD FIELDS LIMITED

In our opinion the accounts on pages 10 to 20 (incorporating the accounts of the Company's subsidiaries which have been audited by other firms) have been properly prepared in accordance with the provisions of the Companies Acts, 1948 and 1967, and give a true and fair view of the state of affairs of the Company at 30th June, 1968 and, so far as concerns members of the Company, of the state of affairs and the profit of the Group.

TURQUAND, YOUNGS & CO., Chartered Accountants, Auditors.

4 COLEMAN STREET, LONDON, E.C.2. 8th October, 1968.

# Group Operations

It is the usual practice to show the Group company figures in this report only in sterling and for this purpose to convert the results of overseas companies into sterling at the ruling rate of exchange.

This year, as explained near the top of page 5, the whole of the overseas profits for the year under review—as well as other figures relating to the year and year-end—have been converted into sterling at the rate of exchange ruling on 30th June, 1968—i.e. at post-devaluation rates.

However, where results for the previous year are given these have been converted into sterling at pre-devaluation rates and so that valid comparisons can be made—in respect of the overseas company itself as well as in terms of the effects in sterling—local currency figures (which are unaffected by devaluation) are also shown.

# SOUTH AFRICA

### GOLD FIELDS OF SOUTH AFRICA LIMITED

The management of the Group interests in southern Africa is the responsibility of this wholly-owned mining finance company. It provides centralised administrative and technical services to a large number of mining, investment, finance and industrial companies in all of which the Group has direct or indirect holdings.

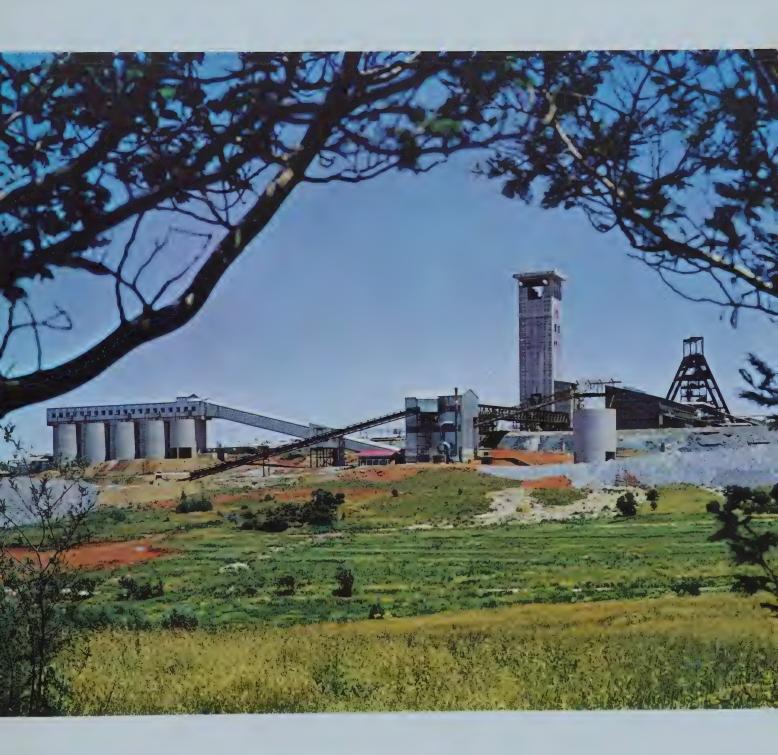
Capital employed by Gold Fields of South Africa Limited and its subsidiaries at 30th June, 1968, amounted to £18.7 million (R32.1 million), compared with £9.8 million (R19.6 million) at 30th June, 1967. Consolidated profit before tax amounted to £2.6 million (R4.4 million) compared with £1.7 million (R3.4 million) for the previous year. The increase in capital employed and profit reflect the arrangements whereby the companies of the New Witwatersrand Gold Exploration Company Limited group became subsidiaries as from 1st July, 1967.

The following paragraphs contain details of certain of the Group interests in southern Africa, the major part of which are held by Consolidated Gold Fields Limited.

### **GOLD**

At 30th June, 1968, Gold Fields of South Africa administered one developing and ten producing gold mines. The Kloof gold mine commenced production in January, 1968, and preparatory work for the new East Driefontein gold mine was put in hand during the year.

Group gold production again increased and amounted to 5.43 million ounces, equivalent to 18 per cent. of the total South African gold output. Despite increases in operating costs the combined working profits from Group gold mines rose to £34.3 million (R58.8 million) from £27.7 million (R55.4 million) in the previous year. The Group's five producing mines on the West Wits Line—West Driefontein, Doornfontein, Libanon, Venterspost and Kloof—contributed 94.5 per cent. of this profit. Total distributions by Group administered gold mines amounted to £12.6 million (R21.6 million) compared with £10.5 million (R21.0 million) for the previous year.



Kloof Mine was officially opened by the Honourable Dr. Carel de Wet, the South African Minister of Mines and Planning on 29th January, 1968. This picture shows the reduction works with the main shaft and ventilation shaft headgears in the background.

### West Witwatersrand Areas Limited

One of the Group's largest single direct interests in South Africa continues to be its 42 per cent. holding in this important company, which has substantial investments in the gold mines on the West Wits line. Profit after tax for the year was £5.1 million (R8.8 million) compared with £2.9 million (R5.7 million) in the previous year, but of this increased surplus £1.7 million represented profit on the sale of certain investments which realised £2.3 million. Total dividend distributions amounted to £2.7 million.

The results of the programme of exploration, completed during the previous year in the area to the east of the West Driefontein and Western Deep Levels mines, indicated sufficient ore of economic grade at practicable mining depths to warrant the opening up of a new mine. During the year the South African Government agreed to grant a mining lease in respect of the area and this lease will be ceded to East Driefontein Gold Mining Company Limited, a new company formed for the purpose of carrying out the mining operations.

In addition to the sale of investments, realising £2.3 million, West Wits itself made a rights issue during the year to raise a further £4.9 million of the funds required to cover its intended participation in the first and second tranches of capital required by East Driefontein.

At 30th June, 1968, the market value of investments held by West Wits was £100 million (R171 million) compared with £50 million (R100 million) at 30th June, 1967.

Since the close of the year West Wits and its subsidiaries have subscribed at par for 32 per cent. of the capital of the East Driefontein company and rights to subscribe for a further 46 per cent. of the capital were passed to West Wits shareholders.

### West Driefontein Gold Mining Company Limited

This outstanding company, in which the Group has a direct and indirect beneficial interest of 21 per cent., again achieved record results. It produced 2.5 million ounces of gold for a working profit of £23 million. Taxation and State's share of profit absorbed £13.4 million and dividends paid to shareholders totalled £8.0 million.

West Driefontein is providing facilities and assistance in connection with the initial development and opening up of the East Driefontein mine. This will enable production at East Driefontein to commence at an earlier date than would otherwise be the case. The West Driefontein company is being reimbursed for the costs of this assistance and, in addition, its shareholders were given the right to subscribe at par for 4.5 per cent. of the capital of East Driefontein.

### **Kloof Gold Mining Company Limited**

The Group has a direct and indirect beneficial interest amounting to 27 per cent. in Kloof. Milling of stockpiled and newly mined ore commenced in January, 1968, and for the period ended 30th June, 1968, 178,400 ounces of gold were produced for a working profit of £1,099,000.

Due to difficult ground conditions the sinking of the main (No. 1) shaft was not completed to its final depth of 6,700 feet below collar until May, 1968. As a result of the delay in the sinking of the shaft, and the time required for equipping, it is not expected that the milling rate of 100,000 tons per month will be achieved before January, 1969, some six months later than forecast. It is expected that the milling rate of 180,000 tons per month will be achieved in the September quarter of 1969.



The Leslie Williams Memorial Hospital, on the Far West Rand, built in memory of the former Senior Medical Officer of Gold Fields of South Africa. Completed in October 1967, at a cost of £920,000, the hospital has 328 beds and provides medical services for Bantu workers of the West Driefontein and Doornfontein mines. It incorporates the newest and best of modern hospital design and equipment.

### East Driefontein Gold Mining Company Limited

This company was incorporated in May, 1968, to exploit the 85 million tons of ore which an extensive drilling programme has indicated to be available for milling at an average yield of 10.5 dwt. per ton.

Three reefs will be worked and initial underground development is being carried out from West Driefontein No. 4 shaft. Excavations and the erection of headgears and other surface facilities are in progress for the sinking of three new shafts.

It is expected that milling of ore from the upper levels will begin at a rate of 50,000 tons per month in 1971 and increase progressively thereafter to attain the maximum planned milling rate of 200,000 tons per month by 1976.

An offer of shares was made in June, 1968, and raised the first tranche of £17.5 million of the capital required to finance the opening up of the property. It is expected that a second tranche of similar size will have to be raised in 1970. It is estimated that £41 million will be expended before the stage is reached in 1974 when further expenditure can be wholly financed from revenue. The additional £6 million will be appropriated from working profits during this period.

The Group's direct and indirect beneficial interests in East Driefontein amount to 32 per cent.

### **PLATINUM**

Through its interest in the Waterval and Union Platinum companies, the Group has a beneficial interest of 21 per cent. in Rustenburg Platinum Mines Limited. Rustenburg accounts for approximately 75 per cent. of the total free world output of platinum.

The output of refined metal from Rustenburg increased steadily during the year and work proceeded according to plan on an expansion scheme to raise mine production to 850,000 ounces of platinum per annum by December, 1969. Plans for further expansion have been announced.

Demand for Rustenburg's platinum continued to exceed supply and its selling price was raised from £45 10s. per ounce, the official price fixed after the devaluation of sterling in November, 1967, to £50 per ounce with effect from 1st July, 1968.

Rustenburg's profit before tax for the year ended 31st August, 1968, amounted to £18.6 million and dividends for the year were increased by 10 per cent. to £5.8 million. The gross dividend income received by the Group from its investment in platinum for the year to 30th June, 1968, amounted to £1.5 million.

### TIN

The combined production of Rooiberg Minerals Development Company Limited and Union Tin Mines Limited amounted to 1,505 tons of metallic tin in concentrate. The average net price received for tin was lower and the combined working profit before tax was £652,000 (R1,117,000), compared with £638,000 (R1,276,000) for the previous year.

Rooiberg is embarking on an expansion programme at an estimated cost of £1.0 million to increase the output of tin in concentrates from the present level of about 95 tons to 135 tons per month.

### VANADIUM AND ZINC

The South West Africa Company, Limited, in which the Group has an interest of 40 per cent., operates mines producing vanadium and zinc as well as lead, tin and tungsten. Revenue for the year was adversely affected by lower production of vanadium concentrates and a general increase in realisation charges. The profit before tax was £338,000 compared with £693,000 in the previous year.

Kiln Products Limited, in which the Group's total beneficial interest is 41 per cent., is erecting a kiln to produce zinc oxide concentrates at the Berg Aukas mine of the South West Africa Company. Construction is proceeding well and the kiln is expected to be in operation in the first quarter of 1969.

Kiln Products will supply part of the feed to the electrolytic refinery of the Zinc Corporation of South Africa Limited in which the Group has direct and indirect beneficial interests amounting to 33 per cent. Construction of the refinery and the associated acid plant is well advanced and production of zinc metal is expected to commence in the first quarter of 1969. This will be the first electrolytic zinc refinery in South Africa and it will be able to meet that country's entire current requirements of this grade of zinc, which have hitherto been imported.

### **OTHER MINERALS**

Star Diamonds (Proprietary) Limited, in which the Group has a 35 per cent. beneficial interest, operates a diamond mine in the Orange Free State. The working profit declined to £99,000 (R169,000) compared with £109,000 (R217,000) for the previous year, due largely to a fall in the grade of ore mined.

The Group has a beneficial interest of 33 per cent. in Apex Mines Limited, which operates the Greenside Colliery in the Eastern Transvaal. Sales fell by 46,000 tons to 1,014,000 tons and working profit totalled £155,000 (R265,000) compared with £143,000 (R286,000) in the previous year. Production of blend coking coal for the Highveld Steel and Vanadium Corporation Limited started on a small scale in March, 1968, four months earlier than originally scheduled.

Glenover Phosphate Limited, a wholly-owned subsidiary which works a deposit in the Northern Transvaal, made a working profit of £79,000 (R135,000) compared with £64,000 (R127,000) in 1967.

#### **INDUSTRIAL**

The industrial division of Gold Fields of South Africa experienced difficult trading conditions during the year but the consolidated profit before tax was higher at £269,000. Its activities include the manufacture of locomotives, rock handling equipment, filtration plant, diamond drill crowns and moulded rubber components. Arrangements are in hand for the rationalisation and merging of certain of the division's engineering interests.

### **EXPLORATION**

Gold Fields of South Africa Limited has continued exploration throughout the year on a number of prospects. On the farm Zwartkloof in the Northern Transvaal economic deposits of fluorspar have been discovered and a mine is to be established there to produce 50,000 tons of acid grade fluorspar per annum; the estimated total capital cost is £1.75 million.

### AUSTRALASIA

### CONSOLIDATED GOLD FIELDS AUSTRALIA LIMITED

This company, in which the Group has a beneficial interest of 76 per cent., is responsible for the management of the Group's interests in Australasia. The consolidated profit of the company and its subsidiaries amounted to £5,428,000. After deducting tax of £1,924,000 and minority interests of £990,000 the net profit was £2,514,000 (\$A5,387,000) compared with £1,646,000 (\$A4,114,000) in the previous year. The increased scale of operations at Mount Goldsworthy contributed substantially to the higher profit. There was also a significant increase in the profits of Commonwealth Mining Investments (Australia) Limited.

### COAL

The Bellambi Coal Company Limited exports the major part of its coal production to Japan and additional sales contracts have been negotiated there which will ensure a substantial outlet for the company's coking coal until April, 1978. The longwall mining equipment is now operating satisfactorily and the company will be further increasing its coal production to meet its commitments under these new contracts.

The profit for the year before tax amounted to £252,000 (\$A539,000) compared with £145,000 (\$A363,000) in the previous year.

### **COPPER**

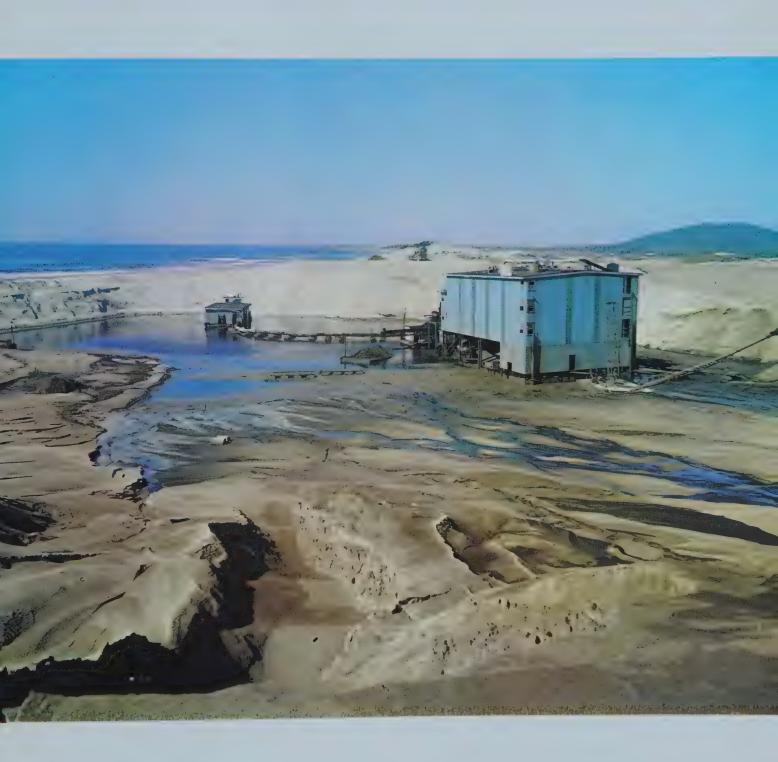
The Mount Lyell Mining and Railway Company Limited produced 14,100 tons of copper from its open-cut mine and adjacent underground deposits in Tasmania compared with 14,600 tons in the previous year. The lower production was due to a decrease in the grade of ore treated.

In spite of higher copper prices, there was a small decline in profit before tax to £1,533,000 (\$A3,285,000) compared with last year's record profit of £1,579,000 (\$A3,949,000).

The exploratory drilling of the mineralised ground under the open-cut mine was continued and feasibility studies to determine the economics of mining this ground were completed. Total ore reserves are now estimated at 42 million tons at 1.4 per cent. copper compared with 17 million at 1.0 per cent. in 1967. Since the end of the year plans have been announced for a major expansion scheme which will also include the construction of a sulphuric acid plant in conjunction with E.Z. Industries Limited.

#### INDUSTRIAL

Depressed economic conditions in New Zealand again adversely affected the results of Zip Holdings Limited and despite rationalisation of its manufacturing and wholesale operations, profit before tax was £86,000 (\$NZ184,000) compared with £251,000 (\$NZ505,000) for the previous year.



Dredging for mineral sands at one of the properties of Associated Minerals Consolidated along the east coast of New South Wales, Australia. The unit shown here processes 600 tons of sand per hour.

### **IRON ORE**

Consolidated Gold Fields Australia Limited has a one-third interest in the Mount Goldsworthy project. The operating company, Goldsworthy Mining Limited, increased its production, and shipments of iron ore were 4.05 million tons compared with 2.2 million tons in the previous year. The proportion of profit before tax attributable to Consolidated Gold Fields Australia Limited was £1,869,000 (\$A4,005,000) of which £1,249,000 (\$A2,675,000) was included in Group profits and the balance retained by the operating company. In the previous year profit before tax was £641,000 (\$A1,604,000) of which £463,000 (\$A1,158,000) was included in Group profits.

As a result of further sales to Japanese buyers, the outstanding contracted tonnage has increased from 19.6 to 25.7 million tons. Contracted sales previously terminated in 1973 but now extend to 1979.

### MINING FINANCE

The operations of Commonwealth Mining Investments (Australia) Limited, including the surplus on the realisation of investments, resulted in a record total surplus before tax of £1,252,000 (\$A2,683,000) compared with £563,000 (\$A1,406,000) in the previous year. This result reflects the buoyant mining share market in Australia during the year.

At 30th June, 1968, the market value of the company's quoted investments was £13.9 million compared with a book value of £5.1 million. The portfolio covers a wide range of mineral and industrial stocks in Australia, North America and South Africa.

### RUTILE AND ZIRCON

Associated Minerals Consolidated Limited, the world's largest producer of rutile and zircon, showed an increase in both production and profit during the year. Production amounted to 88,000 tons of rutile and 86,800 tons of zircon compared with 82,100 tons and 73,000 tons respectively in the previous year. Profit before tax rose to £1,231,000 (\$A2,637,000) from £779,000 (\$A1,979,000).

In April, 1968, a new dredge and concentrating plant with a capacity to treat 1,500 tons of mineral sands per hour started operations on the company's leases on Stradbroke Island in Queensland. This new equipment is operating satisfactorily.

During the year the company extended its contract with American Potash and Chemical Corporation for delivery of an additional 105,000 tons of rutile between 1971 and 1974. At the end of the year forward sales contracts were held for 493,000 tons of rutile and zircon.

### TIN

Renison Limited encountered severe metallurgical difficulties in the recovery of tin from the ore treated during the year. As a result the company incurred a loss of £425,000 (\$A910,000) compared with a profit of £16,000 (\$A40,000) last year despite an increase in tin production from 543 tons to 1,134 tons.

Investigation of the metallurgical problem continues but, in the meantime, there are indications that improved results will be obtained from treatment of ore from other areas of the mine.

### **EXPLORATION**

New Consolidated Gold Fields (Australasia) Pty. Limited continued its exploration activities throughout the Australian Continent, and directed its efforts particularly towards the discovery of nickel deposits in the Kalgoorlie district.

Consolidated Gold Fields Australia Limited, together with Lake View and Star, Limited, were the successful applicants for exploration rights over a major area near Lake Rebecca, north-east of Kalgoorlie. Under a joint venture agreement, the two companies are engaged in prospecting operations in this district where their total concessions now cover 240 square miles. In addition, exploration of other areas held by the company in its own right elsewhere in Western Australia, comprising some 103 square miles, has continued. No significant finds have been made either in these or other areas, but drilling and geophysical programmes are still in progress.

### **CANADA**

### **NEWCONEX HOLDINGS LIMITED**

This company, in which a 60 per cent. interest is held, is the main vehicle for extending and developing the Group's interests in the Canadian mining and industrial fields. The net asset value at 30th June, 1968, including appreciation on the investment portfolio, amounted to £6.8 million.

Profits before tax amounted to £350,000 (Can.\$907,000) compared with £155,000 (Can.\$470,000) for the previous year. In addition, capital gains on realisation of certain investments amounted to £174,000.

During the year Newconex Holdings acquired from Newconex Canadian Exploration Limited its right to finance 20 per cent. of Coppermine River Limited, a new company formed to take over approximately 120,000 acres in the Northwest Territories where encouraging copper mineralisation has been discovered over extensive areas. Work has been concentrated initially at one location where about three million tons averaging over 3 per cent. copper have been indicated. Further work on this and other areas continues.

Pacific Truck and Trailer Manufacturing Limited, in which Newconex Holdings has a 75 per cent. interest, manufactures heavy logging trucks and trailers. The company had a successful year in spite of strikes in the timber industry of British Columbia and the difficulties involved in moving its manufacturing plant to a larger site.

### NEWCONEX CANADIAN EXPLORATION LIMITED

The mineral exploration programme of this wholly-owned subsidiary was continued during the year. The company also participated in several joint ventures. It has taken participations of 20 per cent. in Northville Explorations Limited and 15 per cent. in Teshierpi Mines Limited, both of which have been formed to explore additional ground in the Coppermine River area.

### UNITED STATES OF AMERICA

### GOLD FIELDS AMERICAN CORPORATION

Gold Fields American Corporation and Tri-State Zinc, Inc., two separate wholly-owned subsidiaries, were merged on 1st January, 1968, and it is expected that appreciable economies will result. The grade of ore mined at the New Market Zinc mine in Tennessee, formerly operated by Tri-State Zinc, was lower than expected, resulting in a small net loss from operations. Responsibility for management of the New Market mine has been transferred to the American Zinc Company.

Gold Fields American Corporation acts as the representative of the parent company and maintains liaison with the Group's interests in the United States; it also provides administrative services to Buell Engineering.

### AMERICAN ZINC COMPANY

The Group has a 60 per cent. interest in this company which is engaged primarily in the mining, extraction and marketing of zinc. Its sales include slab zinc and zinc oxide, with sulphuric acid, cadmium and other materials as by-products. The company also produces crushed stone, river sand and gravel.

Although sales revenue improved by 14 per cent. reflecting increased zinc consumption and a higher share of the market due to a seven months' strike at the plants of certain competitors, the year was again a difficult one. Heavy expenses were incurred as a result of prolonged start-up difficulties affecting new units at two of the company's major manufacturing centres. There were also substantial increases in interest payments and depreciation charges arising out of the company's large programme of expansion and modernisation. As a result there was a loss of £585,000 (U.S. \$1,404,000) compared with the loss of £937,000 (U.S. \$2,625,000) in the previous year. After allowing for a tax credit the net loss was reduced to £377,000. Because of continued losses dividends were discontinued after the first quarter of the year.

The company's capital programme, which was begun in 1966, was virtually completed by the end of the year at a cost of approximately £13 million. The last project in the programme, the Immel Mine in Tennessee, came into operation in March, 1968. Grade and costs at this mine are well in line with expectations. Expenditure has been financed partly from the company's own resources and partly by a loan of £8.75 million (U.S. \$21 million) from a consortium of American Banks.

The start-up difficulties necessitated further finance and Gold Fields American Corporation has made available a credit facility of £2.1 million of which £833,000 had been drawn at 30th June.

### BUELL ENGINEERING COMPANY, INC.

This company manufactures and sells equipment for the control and recovery of industrial dust. Orders on hand at the end of the year exceeded the record level achieved in 1966/67. The profit for the year was lower in the face of highly competitive conditions. The company is placing increased emphasis on research and development and has extended the range of its products by developing several new items of equipment.

### UNITED KINGDOM

### **INDUSTRIAL**

The aggregate turnover of the United Kingdom industrial subsidiaries was £5 million and profits before tax totalled £693,000 compared with £391,000 for the previous year. The capital employed by these companies at 30th June, 1968, was approximately £1.7 million.

Alumasc Limited, which manufactures cast and pressed products in aluminium and other non-ferrous metals, earned profits substantially higher than in the previous year. Sales of aluminium casks and equipment to the brewing industry again improved and there was a marked increase in demand for general industrial products. Plant modernisation continues and additional automated equipment is being installed.

Ambuco Limited designs and supplies equipment for the collection and recovery of industrial dust and fume, industrial dryers, refractory installations and pneumatic conveying systems. Sales were at a record level and profits showed a satisfactory increase. The company's activities extend over a wide area of industry and now include an increasing participation in sub-contracting for oil refinery construction.

Metalion Limited is engaged in metal finishing and light engineering and Musgrove & Green Limited produces a wide range of light metal fabrications. Profits showed little change compared with the previous year.

### **COMMERCIAL**

The profits of C. Tennant, Sons and Company Limited and its subsidiaries were a record at £394,000 before tax compared with £340,000 in the previous year. Turnover increased by nearly £5 million to £33 million.

Tennant Trading Limited had a successful year. There was a marked increase in turnover and profits from merchanting activities in overseas markets. Earnings from alloys and minerals showed an improvement but earnings from chemicals did not reach the exceptional level achieved in the previous year.

The export financing activities of Tennant Guaranty continued to produce satisfactory profits. A £10 million credit facility to assist British exports to the Philippines was negotiated during the year.

### **EXPLORATION**

Exploration activities in the British Isles continued throughout the year on a number of prospects. The work was again mainly concentrated on the Wheal Jane area near Truro where considerable tonnages of tin-bearing ore have been disclosed. An intensive programme of metallurgical testwork and underground development is in progress.

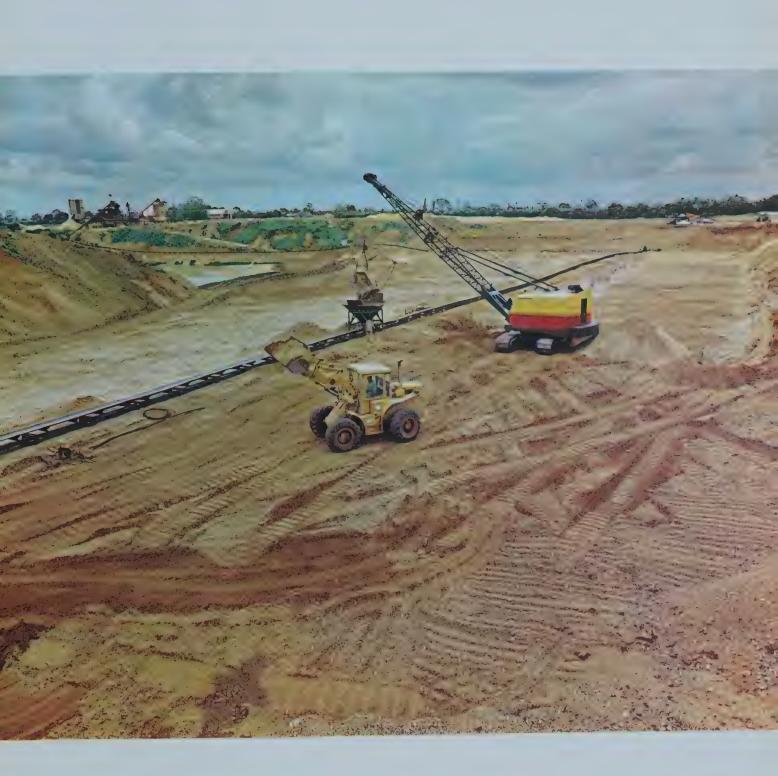
### SAND, GRAVEL AND QUARRIED STONE

As part of its policy to expand activities in the United Kingdom, the Company acquired the whole of the equity capital of Greenwoods (St. Ives) Limited which became a subsidiary of the Group in July, 1967. Greenwoods operates sand and gravel pits in eleven English counties and quarries stone in South Wales; total sales exceed 2.7 million tons per annum. It also produces ready-mixed concrete, manufactures a wide range of concrete products and operates a general haulage fleet.

The company's last financial year ended on 30th September, 1967, and in the three months of that year which were attributable to the Group, profits before tax amounted to £133,000. The accounting period has now been changed to conform with that of the Group and for the nine months to 30th June, 1968, profits before tax improved to £163,000 when compared with £108,000 in the corresponding period of the previous year.

The sand, gravel and concrete operations showed improved results but there were substantial difficulties in the quarrying and road haulage divisions. These have required considerable reorganising and re-equipping, the benefits of which have yet to be reflected in profits.

During the year Greenwoods expanded its business by the purchase of a further quarry in South Wales. Since the end of the year successful offers have been made for a number of private companies producing sand, gravel, stone and ready-mixed concrete.



A general view of Stanway, near Colchester, one of Greenwoods' 24 sand and gravel pits in the United Kingdom. The Sand and Gravel Division of Greenwoods has an annual output in excess of 2 million tons. This picture shows material being loaded into a hopper for transmission by conveyor to the washing and grading plant which can be seen in the background (left).

# Principal Subsidiary Companies

and

## Principal Group Interests

in which the equity interest exceeds 10%

Company and Country of Operations	Direc	t Interests:	Group Beneficial	Principal Activities			
	Parent	Parent and Subsidiaries	Interest				
	%	0/0	%				
South Africa							
Gold Fields of South Africa Ltd.	100	100	100	Finance and management			
Doornfontein Gold Mining Co. Ltd. East Driefontein Gold Mining Co. Ltd. Kloof Gold Mining Co. Ltd.	12 13 9	12 20 9	12 19 9				
do. Combined Units Luipaards Vlei Estate and Gold Mining Co. Ltd. Spaarwater Gold Mining Co. Ltd. Sub Nigel Ltd.	23 10 3 9	24 11 11 11	24 11 11 11	Gold mining			
Vlakfontein Gold Mining Co. Ltd. Vogelstruisbult Gold Mining Areas Ltd. West Driefontein Gold Mining Co. Ltd. West Witwatersrand Areas Ltd.	11 10 11 35	11 20 13 42	11 18 13 42	Gold mining investment			
Union Platinum Mining Co. Ltd. Waterval (Rustenburg) Platinum Mining Co. Ltd.	5 46	12 46	11 46	Holding companies—platinum			
Apex Mines Ltd. do. "A" shares Glenover Phosphate Ltd. Rooiberg Minerals Development Co. Ltd. Star Diamonds (Pty.) Ltd. South West Africa Co. Ltd. Union Tin Mines Ltd. Vierfontein Colliery Ltd.*	13   14	31 39 100 23 100 40 29 14	30 36 100 22 35 40 9	Coal mining Phosphate mining Tin mining Diamond mining Zinc and vanadium mining Tin mining Coal mining			
Anglo-Rand Mining & Finance Corporation Ltd. Beatrice Gold Mining Co. Ltd. Eimco (South Africa) (Pty.) Ltd. G. F. Diamond Drilling and Dev. Co. (Pty.) Ltd. G. F. Industrial Holdings Co. Ltd. do. Participating Preference Capital G. F. Industrial Property Co. (Pty.) Ltd. Hunslet Taylor Consolidated (Pty.) Ltd. Kiln Products Ltd. Lydenburg Gold Farms Co. Ltd. New Durban Gold and Industrials Ltd. New Witwatersrand Gold Exploration Co. Ltd. Rubber and Wheel Industries (Pty.) Ltd. Selected Mining Holdings Ltd. South African Quarry Industries Ltd.* Taycent Engineering Co. (Pty.) Ltd. Zinc Corporation of South Africa Ltd.		59 61 55 100 100 100 100 90 51 46 84 55 75 64 17	32 27 48 87 100 55 73 78 39 26 73 55 65 35 13 87 29	Mining finance  Marketing and general agency Diamond drill bits Holding company  Property company Locomotives, mining equipment Production of zinc oxides Mining finance Property company Mining finance Moulded rubber components Holding company—diamonds Lime and gravel Light engineering Zinc smelting			

Note: West Witwatersrand Areas Ltd. and its subsidiaries have substantial holdings in many of the Group's South African interests. Such holdings, which are not reflected in the above figures, include interests of 33% in Kloof Gold Mining Co. Ltd., 32% in East Driefontein Gold Mining Co. Ltd., 27% in Libanon Gold Mining Co. Ltd., 21% in Venterspost Gold Mining Co. Ltd., 20% in West Driefontein Gold Mining Co. Ltd. and 19% in Doornfontein Gold Mining Co. Ltd.

### Australia

Tustialia				
Consolidated Gold Fields Australia Ltd.	—	76	76	Finance and management
Associated Minerals Consolidated Ltd. Bellambi Coal Co. Ltd. Commonwealth Mining Investments (Aust.) Ltd. Goldsworthy Mining Ltd.* Lake View and Star Ltd. Mount Lyell Mining and Railway Co. Ltd. New Consolidated Gold Fields (A'sia.) Pty. Ltd. Renison Ltd.		66 69 60 33 16 60 100 64	48 51 46 25 12 46 76 34	Rutile and zircon production Coal mining Mining finance Iron ore mining Gold mining Copper mining and smelting Mining exploration Tin mining
Canada				
Newconex Holdings Ltd.		60	60	Finance and management
Newconex Canadian Exploration Ltd. Pacific Truck and Trailer Manufacturing Ltd. Pyramid Mining Co. Ltd.*	= =	100 75 11	100 45 7	Mining exploration Trucks for lumber industry Mining exploration
New Zealand				
Zip Holdings Ltd.		51	39	Domestic hardware
Norway				
A/S Bjolvefossen*		27	27	Ferro-alloys
United Kingdom				
Gold Fields Mining & Industrial Ltd.	100	100	100	Finance and management
Alumasc Ltd. Ambuco Ltd. Anglo-French Exploration Co. Ltd. British-Borneo Petroleum Syndicate Ltd.* Gold Fields Industrial Holdings Ltd. Greenwoods (St. Ives) Ltd. Greenwoods Transport Ltd. St. Ives Quarries Ltd. St. Ives Sand & Gravel Co. Ltd. Metalion Ltd. Mining and Metallurgical Agency Ltd. Musgrove & Green Ltd. C. Tennant, Sons & Co. Ltd. do. Preference Capital Tennant Guaranty Ltd. Tennant Trading Ltd. Tennant, Budd and Roderic Pratt Ltd.	100 100 100 100 100 100 100	98 100 100 12 100 100 100 100 100 50 85 100 100 100 100	98 100 100 12 100 100 100 100 100 50 85 100 100 100 100 57	Aluminium products Dust and fume control plant Investment  Holding and finance  General haulage Stone and concrete Sand, gravel and concrete Metal finishing processes Marketing and general agency Metal fabrication Holding and finance  Export finance Trading and general agency Insurance
U.S.A.				
Gold Fields American Corporation	_	100	100	Management
American Zinc Co. American Limestone Co. Buell Engineering Co. Inc.	51 — —	60 100 100	60 60 100	Zinc mining and smelting Sand, gravel and concrete Dust and fume control plant

Notes: 1 \*All the companies in the schedule are administered by the Group except those marked with an asterisk.

<sup>2 †</sup>The beneficial interests in equity shown above reflect holdings by the parent and subsidiary companies only and the proportion of profits attributable to the shareholders of Consolidated Gold Fields Limited in the Group Accounts. In addition, the Group has indirect interests in a number of cases through non-subsidiary companies.

<sup>3</sup> The country of incorporation is as indicated by the heading except in the case of Luipaards Vlei Estate and Gold Mining Co. Ltd., South West Africa Co. Ltd. and Lake View and Star Ltd., all of which are incorporated in the United Kingdom, and Beatrice Gold Mining Co. Ltd., which is incorporated in Rhodesia.

<sup>4</sup> The interest in East Driefontein Gold Mining Co. Ltd. did not arise until after 30th June, 1968.

## Other Group Interests

in which less than 10% of equity capital is held but where the Stock Exchange value of the holding at 30th June, 1968, was in excess of £250,000

### Australia

Ampol Exploration Ltd.
Broken Hill Proprietary Co. Ltd.
Coal & Allied Industries Ltd.
I.C.I. of Australia & New Zealand Ltd.
King Island Scheelite (1947) Ltd.
Mount Isa Mines Ltd.
New Broken Hill Consolidated Ltd.
Western Mining Corporation Ltd.
Western Titanium N.L.

COMPANY

### Canada

Alcan Aluminium Ltd.
Canadian Superior Oil Ltd.
Dome Petroleum Ltd.
Falconbridge Nickel Mines Ltd.
International Nickel Company of Canada Ltd.
Placer Development Ltd.
Rio Algom Mines Ltd.

### South Africa

African Explosives & Chemical Industries Ltd.
De Beers Consolidated Mines Ltd.
Buffelsfontein Gold Mining Co. Ltd.
Elsburg Gold Mining Co. Ltd.
Harmony Gold Mining Co. Ltd.
Kinross Mines Ltd.
St. Helena Gold Mines Ltd.
Western Areas Gold Mining Co. Ltd.
Western Deep Levels Ltd.
Western Holdings Ltd.
Western Reefs Exploration and Development Co. Ltd.
Winkelhaak Mines Ltd.

### U.K.

Burmah Oil Co. Ltd.
Charter Consolidated Ltd.
Johnson, Matthey & Co. Ltd.
Rio Tinto-Zinc Corporation Ltd.
Royal Dutch Petroleum Co.
"Shell" Transport and Trading Co. Ltd.
Ultramar Co. Ltd.

### U.S.A.

American Metal Climax Inc. American Smelting and Refining Co. Cities Service Co. Kawecki Chemical Co. Phelps Dodge Corporation Utah Construction & Mining Co. PRINCIPAL ACTIVITIES

Oil
Iron and steel
Coal
Chemicals
Scheelite (tungsten) mining
Copper, lead, zinc and silver mining
Lead, zinc and silver mining
Gold and nickel mining
Ilmenite mining

Holding company
Oil production
Nickel mining
Lead and zinc mining
Exploration and development
Uranium mining

Explosives and chemicals Diamond mining

Gold mining

Oil
Mining finance
Precious metals
Mining finance
Oil

Molybdenum/copper mining Copper mining, smelting and refining Oil and gas Chemicals Copper Civil engineering and mining

The following information regarding certain substantial non-subsidiary interests of the Group is given in compliance with the requirements of the London Stock Exchange:—

	SHA	ARES	LOAN	TOTAL
	PAR VALUE	ISSUED	CAPITAL	RESERVES
West Witwatersrand Areas Ltd.	R0.25	10,717,898	£4,584,972	£24,086,113
Waterval (Rustenburg) Platinum Mining Co. Ltd.	R0.05	37,125,000	_	£1,379,184

# Analysis of Group Turnover and Profits

	190	58	1967		
	Total Turnover	Profit	Total Turnover	Profit	
	£'000	£'000	£'000	£'000	
Dividends and Interest on Investments in Non-Subsidiary Companies	7,778	7,778	6,738	6,738	
Realisation of Investments	15,689	4,701	10,613	2,680	
Industrial and Commercial Subsidiary Companies—					
Sales of manufactured goods	21,379	1,689	17,457	1,198	
Agency, financing and confirming sales	30,351	373	26,546	329	
Mining Subsidiary Companies—					
Sales of products	55,343	4,449	34,446	2,547	
Administration and Technical Fees received, Commission and Sundry Revenue	3,671	3,671	2,924	2,924	
TURNOVER, AND PROFIT					
before Expenses, Loan Interest and Taxation	134,211	22,661	98,724	16,416	
Less: Administration, Technical and General Expenses		4,301		3,590	
Interest payable on Debentures and Loans		2,012		1,595	
		6,313		5,185	
TURNOVER, AND PROFIT BEFORE TAXATION	134,211	16,348	98,724	11,231	

### Directors' Interests

(including family interests)

### In shares in Consolidated Gold Fields Ltd.

In shares in Consolidat	ted Go	ld :	Fie	lds	Lt	d.													
																	at	30t	h June 1968
																	rdin . sha		2nd Pref. £1 shares
Sir G. S. Harvie-V	Vatt	٠		٠			۰										6	40	_
G. G. Potier .				٠					٠	٠		٠	٠				2,8	20	_
I. D. McCall .												٠					3	13	450
W. J. Busschau							٠				٠						8	10	_
F. R. Cottell .						٠	٠										1,1	22	_
Sir Charles Denma	an .										٠						1,8		_
Lord Erroll of Hal																	-	36	_
A. Louw																	4	70	_
H. A. Mackay .																		_	_
M. Maclachlan .				·	·							·						_	500
J. B. Massy-Green	ie .		i														5	27	_
G. I. Mortimer																	5	27	
M. E. Rich																	9.	41	_
W. Mason Smith																	4	00	_
Sir Richard Snedd																	6	40	500
A. R. O. Williams																	6	40	500
R. A. Young .																	5	00	_
In shares in subsidiary	comp	ani	es:																0.1.00
W. J. Busschau																	(	at 30	Oth June 1968
Anglo-Rand Mi	ning &	Fin	anc	- C	orr	т.	tđ												
Shares of R 0.34			·		•	, L		٠	٠	٠	٠	٠	٠		٠	٠	•	•	2,000
F. R. Cottell																			
Mount Lyell Mi	ining ar	nd I	Rail	way	у Со	o. L	td.												
Shares of Aus.						٠		۰						٠	٠	٠			2,000
I D W C																			
J. B. Massy-Green Consolidated Go		٠	Α	41	11. T	3													
Shares of Aus. \$			Aus	tra	па 1	⊿ια.	•												8,200
Shares of Aus.	1 each	۰	۰	•	۰	۰	۰		٠	٠	٠	*	•	•	•	•	٠	•	0,200
W. Mason Smith																			
American Zinc	Compa	ny																	
Shares of U.S.\$	1 each	٠	٠	۰			٠									4			100
D 4 37																			
R. A. Young	C																		
American Zinc Shares of U.S.\$																			10,945
Wisconsin Zinc			•	•	•	٠	•	•	•	•	•	•	•		•	•	В	•	10,543
Shares of U.S.\$		шу																	1
Shares of U.S.	1 cacii	0		•		•		•	•	•	0		•	•	۰		•		1

All the interests shown above are beneficial interests except those relating to Mr. G. G. Potier and Sir Charles Denman where the beneficial interests in Ordinary shares in Consolidated Gold Fields Ltd. are 2,180 shares and 436 shares respectively. The Directors have no interest in the First Preference shares of the Company, or in the shares or debentures of any subsidiary company other than those shown above.

### Subscriptions and Donations

During the year a total of £5,666 was given for charitable purposes by Group companies in the United Kingdom, of which a considerable part was paid to organisations whose activities were closely connected with the Company's interests.

### **Exports**

During the year under review goods to the value of £6.8 million were exported from the United Kingdom by Group companies. This figure relates to only a small part of the Group's business, the major part of which is concerned with operations overseas. As a result of orders placed in the United Kingdom by overseas companies in the Group, goods to the value of £2.7 million were exported in addition to those referred to above.

### **Employees**

The average number of persons employed by Group companies in the United Kingdom was 3,101 and their aggregate remuneration for the year ended 30th June, 1968, amounted to £3.8 million.

Most of the Group's activities are conducted outside the United Kingdom and, in addition to the foregoing, there were at the year end some 82,000 persons employed by overseas offices and subsidiaries and by associated companies administered by the Group.

### Analysis of Group Revenue

Group revenue of £22.6 million arose from the following sources:—

	South Africa	Austra- lasia	U.S.A.	Canada	U.K., etc.	Total
	%	%	%	%	%	%
Gold	35	_			_	35
Platinum	7	_	— .			. 7
Copper		7	_	_		7
Iron ore		7			_	7
Lead, Zinc and Silver	money	2		1		3
Rutile and Zircon		6			_	6
Other metals and minerals	5	2	3	1	4	15
Industrial and commercial	5	4	4	1	6	20
	52%	28%	7%	3%	10%	100%

### Territorial Distribution of Assets

The percentage of Group Assets, which amounted to £316 million, in various areas of the world was as follows:—

South Africa55%Australasia15%U.S.A.15%Canada3%

U.K. and other areas 12 %

# Ten Year Financial Summary

Figures in £'000

	1050	1000	1061	
EARNINGS	1959	1960	1961	1962
Income:  Investment Income  Profit on Realisation of Investments .  Industrial Companies—net Revenue .  Mining Companies—net Revenue .  Fees, Commission and Sundry Revenue .	2,285 902 207 120 1,538 5,052	3,727 1,146 526 390 1,650 2 7,439	4,661 1,176 976 381 2,026 ————————————————————————————————————	5,085 1,668 437 366 2,192
Expenses: Administration	1,559 54 —————————————————————————————————	2,051 24 2,075	2,165 229 2,394	2,339 379 —— 2,7
PROFIT BEFORE TAXATION	3,439 1,075		6,826 2,646	7,0 2,9
NET PROFIT FOR THE YEAR Attributable to outside shareholders	<b>2,36</b> 4		4,180 149	4,0
GROUP NET PROFIT	2,313	3,188	4,031	3,8
Allocation of Profit:  Dividends paid†	1,110 1,203 ————————————————————————————————————	1,579 1,609 3,188	1,729 2,302 ————————————————————————————————————	1,894 1,939 —— 3,8
†Dividends paid to 5th April, 1966, shown net; thereafter gross				
Dividends per 5s. 0d. Ordinary Share .	1s. 3d	. 1s. 3d.	1s. 3d.	1s. 3
Charged against Investment and Exploration Reserve	461	1,157	2,329	2,1
CAPITAL EMPLOYED				
Net Assets: Investments (at book value)* Fixed Assets Current Assets	16,531 1,068 17,065	23,542 2,422 9,757	25,974 2,367 13,164	25,113 5,007 13,814
Less Current Liabilities and Provisions .	34,664 12,781 ————————————————————————————————————	35,721 6,671 29,050	41,505 6,655 ——— 34,850	43,934 6,561 ——— 37,3
Outside shareholders' interests	184		1,563	2,6
Share Capital, etc.: Capital	9,422 11,691 586	28,748 12,466 15,910 372	33,287 13,451 14,524 5,312	14,528 14,626 5,525
*The Stock Exchange value of quoted investments exceeded their book value	21,699	28,748	33,287	34,6
included in the above by	21,462	18,153	16,404	22,2

## **CONSOLIDATED GOLD FIELDS LIMITED**

### AND SUBSIDIARY COMPANIES

19	963	190	64	19	965	196	56	196	7 196		68	
196 180 103 752 088	10,219	5,920 1,779 1,114 1,951 2,223	12,987	6,400 2,068 1,406 3,111 2,455	15,440	6,926 2,340 1,281 3,794 2,818	17,159	6,738 2,680 1,527 2,547 2,924	16,416	7,778 4,701 2,062 4,449 3,671	22,661	
503 117 —	2,920 7,299 2,619 4,680 459 4,221	2,654 744 ———	3,398 9,589 3,667 5,922 817 5,105	2,955	3,835 11,605 4,035 7,570 1,303 6,267	3,224 1,330	4,554 	3,590 1,595	5,185 11,231 3,621 7,610 1,372 6,238	4,301 2,012	6,313 16,348 5,020 11,328 2,295 9,033	
.21	4,221	2,334 2,771 ——	5,105	2,704	6,267	3,870 3,372	7,242	4,426 1,812	6,238	4,952 4,081	9,033	
	1s. 4½d.		1s. 6d.		1s. 7½d.		1s. 4½d.		1s. 4½d.		1s. 5d.	
	716		999	1	1,399		224		528		1,101	
35 35 45 — 15 42 —	48,873 7,008 41,865	29,291 14,043 31,995 75,329 23,650	51,679 7,555 44,124	33,229 20,950 37,072 91,251 25,805	65,446 10,557 54,889	38,101 28,464 41,098 107,663 30,962	76,701 12,314 64,387	42,085 36,264 48,076 126,425 33,480	92,945 17,714 75,231	55,094 52,377 71,708 	133,517 25,188 108,329	
28 93 44 —	41,865	15,000 16,905 12,219	44,124	16,500 21,264 17,125	54,889	16,500 24,411 23,476	64,387	17,625 31,025 26,581	75,231	20,221 51,993 36,115	108,329	
	23,140		34,057		46,963	1	58,057		60,494		150,382 43	

## Financial Calendar

**Ordinary Shares** Interim Dividend Announced 21st March, 1968 Paid 22nd May, 1968 Final Dividend Announced 8th October, 1968 Pavable 3rd December, 1968 to shareholders registered on 25th October, 1968 **Preference Shares** 7 per cent. First Cumulative Dividends payable 1st January and 1st July 1st April and 1st October 7 per cent. Second Cumulative Half year Results Announced 21st March, 1968

Full year Results ,, 8th October, 1968

Report and Accounts Posted to Shareholders 26th October, 1968

Annual General Meeting

At the Chartered Insurance Institute,20 Aldermanbury, London,

E.C.2, at 11.30 a.m. 19th November, 1968

Chairman's Statement To be posted to

Shareholders 22nd November, 1968

## Capital Gains Tax

The prices of the Company's shares on 6th April, 1965, for the purpose of the capital gains tax provisions of the Finance Act, 1965, were as follows:—

Ordinary Shares of £1 each (sub-divided into four shares of 5s. 0d. each on 1st January, 1968)

7 per cent. First Cumulative Preference Shares

18s. 9d.

7 per cent. Second Cumulative Preference Shares

18s. 9d.

### TO SHAREHOLDERS

Please advise the Chief Registrar, 49 Moorgate, London, E.C.2, or the Johannesburg Registrar, 75 Fox Street, Johannesburg, of any change in your address.













## **Consolidated Gold Fields Limited**

# Ten years of expansion



Gold Fields is an international mining and industrial group established by Cecil Rhodes in 1887. The Company is registered in the United Kingdom and its head office is in London. During the past ten years it has become one of Britain's largest public companies with assets increasing from £46 million in 1958 to £316 million at the present time.

South Africa, Australia, the U.S.A., Canada, Great Britain and New Zealand—each of these countries is now an important area for Group development in mining, manufacturing, industry, trade and finance. During the past five years alone expansion by Gold Fields has included the bringing to production of a new gold mine in South Africa; the acquisition of large commercial and industrial undertakings in Britain and New Zealand; obtaining majority holdings in copper, tin and coal in Australia where an interest is also held in a multi-million pound iron ore project: and in Canada the initial assets of the Group have increased fourfold. Gold Fields administers 18 mines in southern Africa producing gold, tin, coal, diamonds and other minerals. On the world famous West Wits Line which it opened up in the early 1930's, it has five producing gold mines and is establishing a sixth. Foremost among them is West Driefontein, the world's richest gold mine, which produces more than £3 million worth of gold per month. Some of the wealth earned from these mining operations is being re-invested in South African industry in which Gold Fields is taking an increasingly large participation. In the U.S.A. the Group's holding in the American Zinc Company represents an investment of about £6 million that was made in 1963. More recently the scale of expansion has tended to

increase, as illustrated by the acquisition in Britain during the last two years of Amalgamated Roadstone Corporation Limited, Greenwoods (St. Ives) Limited and a number of smaller companies also engaged in quarrying and the production of sand and gravel, purchased at a cost of some  $\pounds 44$  million.

The present market capitalisation of the Group's subsidiary in Australia is about £80 million. Activities in this part of the world include a substantial investment portfolio, a prominent position in the mineral sands industry, coal in New South Wales, copper and tin in Tasmania, iron ore in Western Australia and industry in New Zealand.

All this is a far cry from the early days. When the original Company was founded in 1887 its sole interest was in the gold of South Africa. Today, with more than 250 companies and some 100,000 employees in the Group, Gold Fields means to maintain its lead in the many areas in which it operates. Its young, progressive management supported by teams of technical and financial experts is determined that the Group shall measure up to the vigorous demands imposed by the complexities of the modern world. The policy of expansion and diversification will continue and with its vast experience of the past to help in the days ahead, Gold Fields looks forward to the future with confidence.

S. Hame - Watt



Shaft headgears, sorting and crushing plant at the Kloof gold mine. (left) Weighing gold bars at West Driefontein. (right)

# Gold

South Africa and Australia

At present gold accounts for 35 per cent of the Group's income, about £8 million annually. In South Africa Gold Fields has 10 producing mines (details of which appear on page 29), that provide almost 51 million ounces of gold a year, worth nearly £80 million at today's monetary price of \$ US 35 per ounce. This represents over 12 per cent of the free world's output, and makes Gold Fields the second largest gold producing organisation within the free world. After purification the gold is sold to the Reserve Bank of South Africa, principally for export.

Most of the gold produced by the Group comes from the famous West Wits Line in South Africa which was discovered and first brought into production by Gold Fields more than 30 years ago. Six of the ten mines in this area are administered by the Group; one of them, West Driefontein, produces  $2\frac{1}{2}$  million ounces of gold per year, and earns a working profit of about £23 million.

Exploitation of the West Wits Line is by no means complete: Kloof was brought into production in 1968 and a new gold mine, East Driefontein, is now being established nearby. It is estimated that some £35 million will be required to bring this mine to production and in its lifetime it is expected to provide some £650 million worth of gold (calculated at \$ US 35 per ounce).

At Kalgoorlie, in Western Australia, Gold Fields administers Lake View and Star, the country's largest gold mine.

In March 1968 two international gold markets were established. Previously, since 1934, the price paid for all gold had remained fixed at \$ US 35 an ounce, although the cost of mining had continued to rise. Now, in addition to the fixed price of \$ US 35, a free market exists on which the current gold price is in the region of \$ US 40 an ounce. This development provides an entirely new situation and is significant because as the demand on the free market grows, gold producers can expect to obtain an increasing price for their product. This will also stimulate the development of new mines that would have been uneconomic under the old

Although this metal is maintaining its historical role as an international currency and continues to be used in increasing quantities for the production of jewellery, its greatest potential demand lies in a wide range of industrial applications. High electrical conductivity and resistance to corrosion enables gold to play a vital part in technological progress, particularly in the fields of medicine, space exploration and electronics.



## **Platinum**

South Africa

Rustenburg Platinum Mines Limited is the largest producer of platinum in the free world. Gold Fields has a beneficial interest of 21 per cent in this company hich provides an annual gross dividend of £1½ million and, after gold, represents the Group's most important investment. Outside the communist countries, Rustenburg and International Nickel in Canada, supply virtually all the world's platinum. In order to maintain a stable market, these companies arrange to sell their metal at an agreed price which, at present, is £50 per ounce.

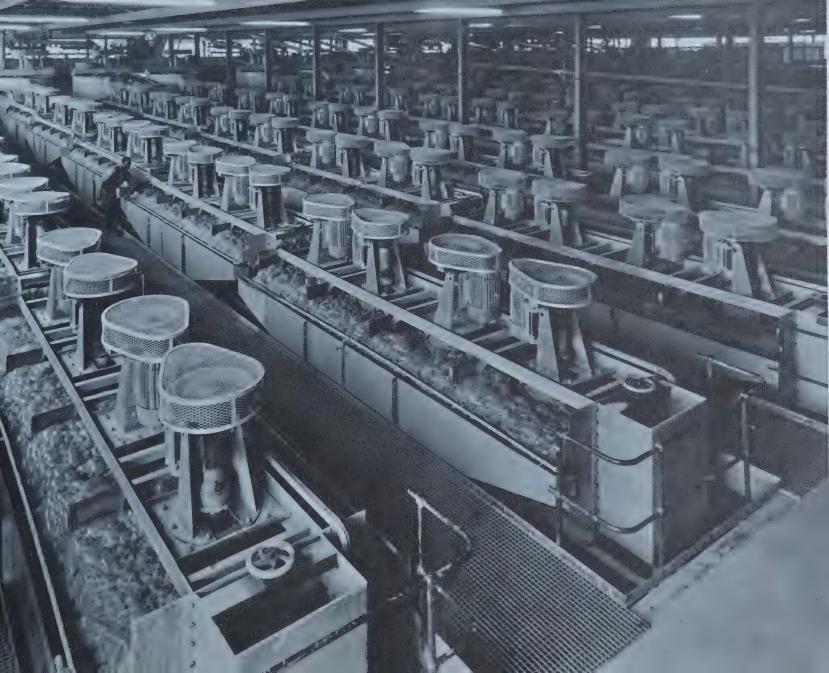
However, the demand for platinum is so great that a free market exists for supplies made available from elsewhere, on which the price per ounce is now in the region of £100. This situation is encouraging a number of potential producers to investigate the possibilities of entering the market. Rustenburg for its part has carried out a series of expansion programmes during the last few years, the most

recent of which is intended to establish production at an annual rate of a million ounces in 1970. Known ore reserves are sufficient to allow output to remain at this level until well beyond the turn of the century. However, exploration is continuing to add to the resources of the company which operates the largest underground mining project in South Africa. Platinum ore usually contains a number of other metals and Rustenburg recovers rhodium, ruthenium, iridium, osmium, gold, copper and nickel as by-products. Johnson Matthey & Co. Limited, a British company in which Gold Fields also holds an interest, has been closely associated with Rustenburg for many years and is its sole refiner and marketing agent. Johnson Matthey is also engaged in an active programme of research and promotion to expand the ways in which metals produced by Rustenburg can be used. The range of applications for the platinum metals is extremely wide

because of their unique combination of properties. Resistance to oxidization and corrosion, a high melting point and intense catalytic activity provide answers to many industrial problems. Some of the important uses include: catalysts for the production of high-octane motor fuels, detergents and nitric acid; spinnerets for the manufacture of man-made fibres, crucibles and bushings for the glass and fibre-glass industry; contacts and resistors for electronics; temperature measuring devices and applications in the medical and dental fields.

There is hardly a major industry that does not rely to some extent on the special properties of platinum group metals, and their importance to the Western world can hardly be over-emphasised.

Banks of cells in the flotation plant at Rustenburg Platinum Mines, South Africa. Platiniferous concentrates are floated off in the froth flowing over the lips of the cells. (right)





Casting blister copper at Mount Lyell. (above)
Mount Lyell open cut mine. (right)

# Copper

**Australia** 

Gold Fields acquired its present interest in copper when Mount Lyell joined the Group in 1964. This open cast mine is on the west coast of Tasmania near Queenstown, not far from the Renison tin mine (see page 16). Although more than half a million tons of copper have been produced since the mine was established in 1896, recent drilling has shown that a large quantity of ore lies beneath the existing workings. Plans to exploit this have been drawn up and the development of underground mines will eventually replace production from the open pit. This expansion programme, which will cost £14 million, is expected to increase the annual output of copper from 15,000 to 25,000 tons by 1973. The Group has a beneficial interest of 47 per cent in Mount Lyell which, at present, makes a pre-tax profit of  $£1\frac{1}{2}$  million. Drilling continues to add to the

company's known ore reserves, at present some 40 million tons containing about 1½ per cent copper. Pyrite concentrates are the company's principal by-product and, at present, these are sold to produce sulphuric acid (see page 21). A certain amount of gold and silver is obtained with the copper. Some 60 per cent of the world production of copper is absorbed by the electrical industry, mainly in the form of copper wire. Possessing excellent thermal conductivity, copper is also used in radiators for automobiles, domestic heating systems as well as marine and industrial heat exchangers. For the latter use its resistance to corrosion is improved by the addition of zinc or nickel producing brass and cupro-nickel respectively. A growing interest in the desalination of water suggests that the use of these alloys, which account for 30 per cent of the consumption of copper, may expand.



## **Diamonds**

South Africa

The Star Diamond mine in the Orange Free State of South Africa, is currently producing a total of about 60,000 carats of diamonds a year. In addition to a large quantity of industrial diamonds, the company recovers a considerable number of gem stones. Gold Fields has a beneficial interest of 35 per cent in this subsidiary which makes a profit before tax of £100,000. A certain amount of capital expenditure is being undertaken to increase

production capacity and some new equipment has recently been brought into use.

The stones produced by the mine are sold in their natural state to Astra, an associated company that trades in rough and polished stones. Diamonds are the hardest natural substance known to man and in addition to their pre-eminence as precious stones, they are in demand for a variety of industrial purposes. They are used,

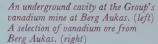
for example, to carry out mining exploration by diamond drilling, in precision grinding and for glass cutting.

The Star Diamond mine in the Orange Free State, South Africa. (below)

A month's supply of uncut stones from the Star Diamond mine. (right)







the region of £400,000 a year.



# Vanadium and Tungsten

South West Africa

The South West Africa Company (S.W.A.Co.) in which Gold Fields has a 40 per cent beneficial interest, operates two mines, Berg Aukas and Brandberg West, in the northern part of South West Africa. This company which joined the Group in 1957 has more than doubled its output during the last 10 years. Ore reserves have recently been substantially increased and S.W.A.Co. expects the demand for its products to continue. Profits before tax, which largely depend upon fluctuating metal prices, are in

Ore from the Berg Aukas mine contains vanadium, lead, zinc and silver. The current yearly production of concentrates has a metallic content equivalent to 18,000 tons of zinc, 5,000 tons of lead, 1,200 tons of vanadium pentoxide and a small amount of silver. Brandberg West produces about 700 tons of mixed tin/tungsten concentrates annually, which contain some 200 tons of metallic tin and 150 tons of tungsten. With the exception of zinc silicate concentrates, which will be absorbed from the beginning of 1969 by Kiln Products, (see page 20), S.W.A.Co's. total annual output is exported to Europe. Tennant Trading, a subsidiary of Gold Fields, acts as selling agent for S.W.A.Co., while Harris and Graham, also a member of the Group, undertakes some of the shipping arrangements. Currently, vanadium and tungsten oxides are worth about f,850 and f,2,000 per ton respectively. These metals are principally employed to improve the physical properties of steel. Tungsten, for example, is used in making machine tool steels and to harden drills, while vanadium forms an essential element in preparing structural steels for the building industry. Vanadium is also being

used as an element in high temperature

titanium alloys.





### Iron Ore

Australia

An ore carrier manoeuvres into position to take on a cargo of iron ore from Mount Goldsworthy in Western Australia. (above)
Crushing, screening, stockpiling and train loading facilities at Mount Goldsworthy. (right)

Mount Goldsworthy which came into production in June 1966, was the first mine to produce iron ore from the Pilbara region of Western Australia. In December, 1964, the Mount Goldsworthy Mining Associates, consisting of Gold Fields and two American partners, concluded agreements to deliver 16½ million tons of ore to Japan. Subsequently, additional arrangements have been

made to supply a further 151 million tons. These contracts which cover shipments from 1966 to 1979 are worth approximately £,120 million. The Mount Goldsworthy deposits are situated in a remote region some 70 miles east of Port Hedland and about 900 miles north of Perth. The project involved not only the development of an open cast mine to produce the ore, but also the construction of a harbour terminal at Port Hedland. It also included the dredging of an access channel thereto by the removal of some 10 million cubic yards of waste to enable 75,000 ton carriers to load the ore cargoes and the building of a 70-mile railway to link the mine and the port. To carry out a programme of this nature in a virtually uninhabited part of the world was a considerable undertaking. A thousand construction workers were provided with services and temporary mobile accommodation while two new townships with power houses, workshops and social services had to be established for permanent staff.

The entire operation was brought to production only 15 months after work began and completion of the first stage of the developmentproduction at the rate of 21 million tons per year—cost £20 million. Annual output is now approaching 5 million tons and this rate can be increased as additional contracts are obtained. This provides a pre-tax revenue of about £51 million in which the Group has a beneficial interest of some 25 per cent. The known ore reserves at Mount Goldsworthy exceed 80 million tons. After crushing, the ore which has an average iron content of 64 per cent, is shipped direct to a consortium of

Japanese steel mills.

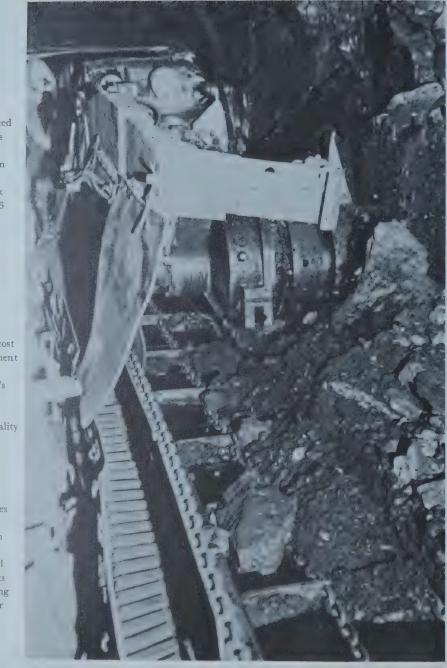


#### Coal

#### South Africa and Australia

Some 80 miles east of Johannesburg in South Africa steam coal is produced by Apex Mines in which Gold Fields has a 33 per cent beneficial interest. At present this company's production rate is in the order of a million tons of coal a year and it makes a pre-tax profit of £220,000. However, in 1966 Apex entered into a 30-year agreement to supply an industrial customer with a special blend of coking coal. Production began in March 1968 and deliveries are expected to increase from approximately 275,000 tons in 1969 to at least 360,000 tons after 1970. To meet this demand a new seam is being brought into production at a cost of about £1½ million. This development will increase capacity and, in due course, more than half the company's operating profit is expected to arise from sales of coking coal. Gold Fields also produces a high quality coking coal near Port Kembla in Australia, at the South Bulli colliery of the Bellambi Coal Company. In addition, Bellambi operates a number of plants which provide metallurgical coke for use in foundries and smelting works. Although some coal from South Bulli is consumed in Australia, it is principally sold overseas. At least 41 million tons will be exported to Japan under contracts that cover a period of six years ending in March 1973, after which a further five year agreement will come into

In view of these contracts, profits



before tax, which stand at about £250,000, are expected to show a considerable increase in the coming years. To meet these commitments a second seam, the Balgownie, has recently been brought into production. The Group has a 51 per cent beneficial interest in this subsidiary.

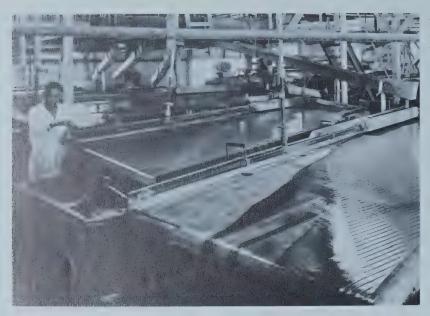
#### **Uranium**

#### South Africa

Gold Fields is well experienced in the production of uranium, but has not been active in this field during recent years because of uneconomic market prices. The sale of uranium was originally limited to various governmental authorities whose requirements were principally for strategic purposes. However, uranium is now being used in increasing quantities by nuclear power stations; this has led to the formation of the Nuclear Fuels Corporation in South Africa to market uranium and the metal is soon expected to re-appear as a principal by-product of some of the Group gold mines. With this in view the economics of recommissioning the joint uranium extraction plant which serves West Driefontein and Doornfontein, moving the plant, or building an entirely new plant, are now being investigated.

Automatic coal cutting at the Bellambi mine in Australia. (left) A rotary filter at work in a South African uranium plant. (right)





#### Tin

#### South Africa and Australia

North of Zeehan, on the west coast of Tasmania, Renison Limited (in which Gold Fields has a 34 per cent beneficial interest) recently brought a new mine and mill to production as part of a £3 million expansion programme to increase capacity ten-fold.

The plant is highly mechanised and an initial production rate of 1,000 tons of ore per day has been achieved.

The current target of tin in concentrates is in the region of 1,700 tons per year but, at present, difficulties are being experienced in reaching this output.

Tin had been mined spasmodically in the Zeehan area for more than 50 years but it was not until 1964,

Tin concentration at Rooiberg.

when Renison became a subsidiary of Gold Fields, that production was envisaged on a large scale. The orebody is sufficiently near the surface to allow access by inclined tunnels and this is an interesting feature of the mine as it allows the ore to be transported by rubber tyred vehicles, a relatively cheap method of haulage. Exploration is continuing to add to the known ore reserves which at present exceed 131 million tons with an average tin content of 0.75 per cent. In South Africa there are two main tin producing companies-Rooiberg and Union Tin-in which Gold Fields has a beneficial interest of 19 and 9 per cent respectively. Both properties are situated 100 miles north of Johannesburg and at present their combined annual output of concentrates contains some 1,500 tons of tin. An expansion programme by Rooiberg,

however, is expected to increase production to 2,000 tons by 1973. Annual profits before tax of these companies amount to some £650,000. The Brandberg West mine of the South West Africa Company (referred to on page 10) produces some 700 tons of mixed tin/tungsten concentrates a year containing about 200 tons of metallic tin. The bulk of the tin concentrates produced by Renison is sold for smelting in Australia. In the case of the mines in South Africa, however, approximately 70 per cent of the concentrates is exported to Europe, the remainder being sold to a local smelter.

Because this metal is non-toxic and extremely resistant to corrosion against a wide range of organic and other liquids, it is used extensively in plating steel for canning to preserve food. Only 25 per cent is used for other purposes which include engine bearings and solder. Recent developments in the chemical industry are providing a growing market for organo-tin compounds.

#### Silver

#### South Africa and Australia

A limited amount of silver, worth about £500,000, is obtained as a by-product by Gold Fields in South Africa and Australia. Throughout the world this metal is frequently produced in association with other minerals and is usually found with gold, copper, lead or zinc.

The Group's gold mines in South Africa all recover silver and together produce some 500,000 ounces annually. It is extracted from the ore with gold

#### Pouring silver at the Rand refinery in Johannesburg. (right)

and forms part of the 'impurities' removed by the Rand Refinery which undertakes the final purification of all gold produced in the Republic. In Australia, both Mount Lyell and Lake View and Star (see pages 6 and 2) have a limited output of silver and together produce some 85,000 ounces per year. Again the metal is extracted with the mines' primary products, copper and gold respectively, and refined at a later stage. Like copper and gold, silver possesses a high electrical conductivity, is resistant to corrosion and as a result, is widely used in the electrical industries. In the form of silver salts, it is also very sensitive to light and this has encouraged its use in domestic, industrial and medical photography. Large amounts for example, are employed in x-ray work. More recently, silver has become an important constituent in batteries to power mobile electrical equipment. For centuries silver has been used to make coinage, jewellery and silverware both for religious and domestic purposes. Since the turn of the century, however, the photographic and electrical industries have absorbed ever increasing supplies and today they account for about half the world demand.

There has been a shortage of silver since the end of World War II and the market price, although until recently fixed by the U.S. Treasury, has shown a tendency to increase. Production has grown, but not fast enough to meet the demand and one result has been its replacement in coinage by alloys such as cupro-nickel. Gold Fields foresees a continued increase in world consumption.





Magnetic separation of mineral sands to isolate rutile, zircon, ilmenite and monazite.

## **Mineral Sands**

Australia

Associated Minerals Consolidated (A.M.C.) is engaged in the production of rutile and zircon along the east coast of Queensland and New South Wales, Australia. Gold Fields has a beneficial interest of 48 per cent in this company which joined the Group in 1961. In recent years there has been a great increase in the demand for mineral sands and a third of Australia's entire output is provided by A.M.C., the largest producer in the world. As by-products the company also produces garnet, ilmenite and monazite.

#### Rutile

Rutile is widely employed as a coating for welding rods and as one of the sources of titanium dioxide. The major use of titanium dioxide is as the means of providing white pigment for paints

because it is non-toxic and retains a purer colour than the other pigments which it has largely replaced. Titanium dioxide derived from rutile is also used to manufacture titanium metal which is light, strong and can be subjected to high temperatures. These properties make it particularly suitable for use in spacecraft, aero engines and for aircraft structures.

#### Zircon

Zircon, mainly employed as a foundry sand, is used for moulds in critical applications because it possesses a higher thermal conductivity than the majority of other sands and thus enables cooling to take place more rapidly. It is also used for ceramics and has a number of applications in the passed through a process of wet chemical industry. Zircon is also the raw material for the production of zirconium metal which is almost entirely absorbed by the nuclear engineering industry. When separated from the hafnium found with it as an impurity, it possesses a particularly low neutron cross section which is essential for materials used to contain nuclear fuel.

#### Monazite

Monazite is one source of the group of minerals collectively known as rare earths. The most common are yttrium, europium, gadolinium and neodymium, which are produced by breaking down the monazite sand into its constituent parts. In spite of being essentially identical chemically, these substances have little in common physically and each possess their own particular characteristics which enable them all to play an important part in technological progress. Rare earths, for example, are used in nuclear engineering, space exploration and forthe production of television tubes and laser beams.

These minerals are found along the coast line and to separate them from waste matter, the sand is dredged and concentration which extracts the heavy mineral sands. These are dried and treated by electrostatic and electromagnetic processes to separate the individual minerals. A.M.C.'s output is increasing, the annual production of rutile and zircon at present being 90,000 and 80,000 tons respectively. The company earns a profit before tax of  $f_{1}$  million a year.



#### Zinc

United States of America, South West Africa and South Africa

One of the largest zinc producers in the U.S.A. joined the Group in May 1963, when Gold Fields purchased a 61 per cent interest in American Zinc. This company is capable of producing about 130,000 tons of slab zinc and 40,000 tons of other zinc products each year.

Most of the American Zinc mining properties are in eastern Tennessee where one, the Young Mine, produces over a million tons of ore a year; there are others, however, in the states of Washington and Wisconsin. The company has recently completed a £13 million expansion programme that has included the development of three new properties to replace older mines and the modernisation of certain refining and smelting plants in Illinois, Ohio and Texas.

The principal market for high grade zinc is the diecasting industry which provides a large number of components for motor vehicles. It is also used for galvanising to prevent rust and as a component in brass. Zinc oxides are employed in manufacturing rubber, paint, chemicals and paper products.



American Zinc manufactures two important by-products—cadmium and sulphuric acid (see facing page). Because of its resistance to corrosion and the good electrical conductivity of its corrosion products, the electronic, radio and computer industries absorb considerable quantities of cadmium. An increasing amount is also being used in nickel-cadmium batteries.

In addition to its zinc interests in North America the Group has recently established South Africa's first electrolytic zinc refinery which is capable of producing 35,000 tons per year and meeting the Republic's requirements, which previously had to be imported. About a third of the concentrates for the plant are being supplied by the South West Africa Company.

A two jib, tractor mounted, drill jumbo at work underground in American Zinc's Young Mine, Tennessee.

American Zinc's sulphuric acid plant at Columbus, Ohio.



### Sulphuric Acid

South Africa, Australia and United States of America

The Group's new zinc smelter in South Africa (See facing page) manufactures sulphuric acid as a by-product at an annual rate of 70,000 tons. The bulk of this output has already been sold under a long-term contract. American Zinc plans to increase its output of sulphuric acid to approximately 200,000 tons per year. It already has an annual market in this by-product valued in excess of £1 $\frac{1}{4}$  million which makes an important contribution to the revenue of the company.

More than 70,000 tons of iron pyrites are obtained each year from the Mount Lyell copper mine in Tasmania (see page 6). At present these are sold before the sulphur they contain has been extracted. However, as part of a current expansion programme, a joint venture has been established whereby, after 1970, the pyrites will be treated by Mount Lyell and its partner, E.Z. Industries. These companies will each supply 150,000 tons of pyrite concentrates to produce a total of 420,000 tons of acid per year. The fertiliser industry uses about half of the world's production of sulphuric acid, mainly in transforming phosphate rock into its more desirable watersoluble forms. Significant quantities of sulphuric acid are also used in ore processing and the production of titanium dioxide pigment (from ilmenite), iron and steel, rayon, detergents and plastics.

## **Phosphates**

South Africa

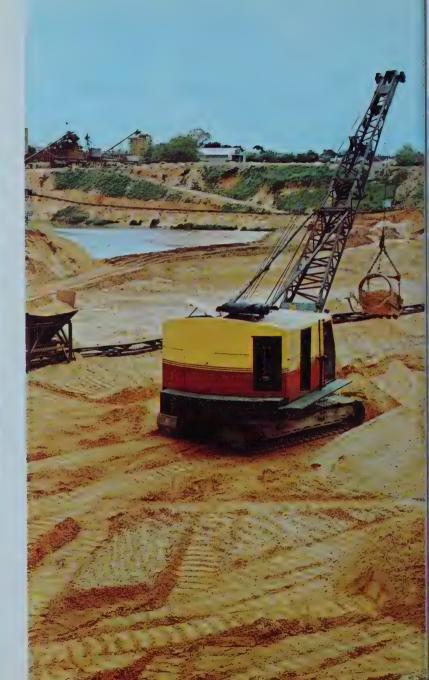
tons at an average grade of 22 per cent phosphorus pentoxide (P<sub>2</sub>O<sub>5</sub>). The phosphate ore has been sold for many years but until 1964 the quantity involved was so small that mechanisation was uneconomic. However, as a result of a new five-year agreement which came into force on 1st July, 1964, the scale of production greatly increased and a capital



', (ilen wer, waste is removed by . . . . he fore the phosphate rock is crushed.

The Glenover Phosphate Company is engaged in exploiting a deposit of phosphate ore by means of open cast mining some 200 miles north-west of Johannesburg. Available ore reserves are currently estimated to be 10 million

programme to equip the mine was put in hand. This contract made provision for initial deliveries of 3,000 tons of ore per month rising to 4,000 tons in 1966 and 6,000 tons in 1968. As a result, the company is selling about 70,000 tons of phosphate rock annually and making a profit entirely attributable to the Group, at the rate of about £100,000 before tax. After the ore has been upgraded it is sold to manufacture a fertiliser used in South Africa.



## **Aggregates**

United Kingdom and United States of America

The Group has recently increased its interest in the production of these bulk minerals by investing some £44 million in the United Kingdom to acquire Amalgamated Roadstone Corporation Limited, Greenwoods (St. Ives) Limited and several other smaller companies in the industry.

The business of Roadstone, the most recent acquisition and the largest ever made by Gold Fields at a cost of £33 million, consists principally of the quarrying and processing of stone of all types for roadmaking and building purposes. Roadstone operates some 40 quarries, four gravel pits and 20 plants manufacturing concrete products and ready mixed concrete. These are spread over a wide area of England, Wales and Northern Ireland and produce some ten million tons of aggregates per annum. A fleet of 13 ships is employed by the group in the coastal stone trade. The business of Greenwoods is broadly similar to that of the Roadstone group; 25 pits are operated in the Midlands and East Anglia which produce 31/4 million tons of sand and gravel per annum. A further million tons of crushed stone is mined from five quarries in South Wales. Some of these



raw materials are used for concrete products which account for a considerable proportion of the business. The company also operates road haulage and warehousing divisions, with depots running north from London to Glasgow.

The Group's other interest in this field is the stone division of American Zinc (see page 20) which dredges sand and gravel from the Tennessee river and operates a number of quarries and

a ready mixed concrete business. This company's annual output, of which half is a by-product of its mining operations, amounts to some five million tons. Some of the products are used for agricultural limestone and flux for the steel industry, but their main consumption, as in Great Britain, is for civil engineering and the construction industry; to build roads, airports, industrial buildings and office blocks.

One of 200 vehicles operated by Greenwoods' transport division loading concrete products manufactured by the Company at a rate of 500 tons per day.



## **Exploration**

Exploration is principally undertaken by Gold Fields in those parts of the world where the Group is well established. In addition to prospecting for new mineral deposits, various companies within the Group carry out programmes in order to determine and add to their ore reserves. In South Africa, an exploration programme recently carried out in an area between West Driefontein and the new Kloof mine indicated that gold is present in sufficient quantities to warrant the establishment of yet another mine (East Driefontein) on the West Wits Line. In the north-east Transvaal a deposit of fluorspar has been discovered and the Group is in the process of developing a mine to produce 50,000 tons a year. Fluorspar is a mineral mainly used as a flux in the production of steel and aluminium and in the manufacture of hydrofluoric acid for the plastics and glass industries. The Group is prospecting for a number of other minerals in the Republic of which tin is the most significant.

The South West Africa Company

controls a substantial deposit of sodium salts, which are amenable to treatment for the production of soda ash. Available reserves would be sufficient to meet South Africa's entire requirements of this substance which is used, principally, in the manufacture of glass, chemicals and paper. The remote situation of the deposit, however, has thus far prevented its exploitation but ways and means of overcoming the transport difficulties involved are being investigated.

Exploration in Australia includes investigation of several properties in Western Australia, principally Lake Rebecca, where prospecting is taking place for nickel, copper, gold, platinum and silver.

An active exploration programme is also being carried out in Canada, mainly in conjunction with other companies. Interesting discoveries were made two years ago in the Pine Point area, while the Group is currently financing three separate projects in the Coppermine River area of the North West Territories. At Pine Point a zinc-lead deposit estimated to contain  $1\frac{1}{2}$  million tons of ore has been found, and at Copper Mine indications of extensive copper mineralisation are currently being examined.



Exploratory drilling in Tasmania.

Wheal Jane, in Cornwall near Truro, is one of the most interesting locations currently being investigated in the United Kingdom by the Group. As a result of an encouraging surface drilling programme, the workings of an old tin mine in the area are being opened up to carry out exploration underground. It is hoped that a decision whether or not to establish a mine in this area will be taken in the near future.

Unloading equipment from a Hercules aircraft for the exploration party in the Coppermine area, Canada. (left)

#### Research

In addition to maintaining laboratories to carry out routine investigations and analyses associated with mining and the production of metals, the Group undertakes a considerable amount of research. This takes a number of forms which include sponsoring pure fundamental study at university level, he investigation of new mining chniques and the promotion of applications for Group products. Some of the most significant work which led to the development of Electrofax oxide, now extensively used in photocopying, was carried out by American Zinc which is constantly seeking to establish new applications for its products. At the present time, these include solutions containing zinc for treating wood products to reduce the risk of fire and infestation. Work is also being carried out to further the use of zinc in paints and as a constituent in fertilisers and cattle feed. In South Africa, Gold Fields makes market research facilities available to the industrial companies within the Group. The promotion of gold, coal and uranium is conducted on an industry basis by the Chamber of Mines, but the Group participates fully in these activities and serves as the Chamber's agent in numerous research projects.

Through their membership of the Chamber of Mines, certain Group companies are associated with the South African Atomic Energy Commission in sponsoring research to increase the purity of uranium concentrates. Investigation of marketing problems facing co-production is undertaken by the Transvaal Coal Owners' Association, of which the Group's Apex Mines company is a member.

The Group has made important contributions to technological progress in mining and methods of extraction. At West Driefontein, for example, electronic control of ore grinding has enabled this operation to adapt itself automatically to take account of the variations in the ore being fed into the plant. Automation of this nature has been taken much further at Kloof where, for the first time in South Africa, a computer is being used to supervise, control and data process, the entire crushing, sorting, milling, filter, thickening and smelting sections of the treatment plant. Gold Fields is also making progress towards greater productivity underground. As part of an investigation into mechanical stoping the 'Myti Mo' scraper has been developed and is undergoing tests

the Doornfontein mine. At the same me experiments using a new long-hole illing technique for cutting orepasses are resulted in reduced costs, approved efficiency and greater safety an was possible using conventional ethods. A revolutionary rock cutter important aspect of Gold Fields' recent growth has been its expansion into industry.

In South Africa the Group has companies which manufacture locomotives, mining equipment and filtration plant, as well as diamond drill crowns, and moulded rubber

filtration plant, as well as diamond drill crowns, and moulded rubber components. Eight miles east of is Johannesburg a site has been developed to house these industrial interests.

ace and Electrical domestic appliances and ent. industrial components are made in U.S.A. New Zealand by Zip Industries, a group of companies acquired in 1964. Pacific Truck & Trailer, a Canadian company which joined the Group in 1967, specialises in the manufacture of custom built trucks and trailers for the logging industry. The company allows

of custom built trucks and trailers for the logging industry. The company also exports heavy duty transporters and produces a range of vehicles for special purposes from snow ploughs to undercarriages for cranes.

In the United States, Buell Engineering Inc., one of the Company's oldest industrial interests, designs, engineers and manufactures a range of products which include electrostatic precipitators, mechanical collectors, bag filters, wet scrubbers, pneumatic and hydraulic conveyors and air

## Industry and Commerce

at the Doornfontein mine. At the same time experiments using a new long-hole drilling technique for cutting orepasses have resulted in reduced costs, improved efficiency and greater safety than was possible using conventional methods. A revolutionary rock cutter announced by the Chamber is being tested underground at two of the Group mines in South Africa. It is claimed that this machine may greatly reduce the amount of waste rock that is at present taken from the mine face and brought to the surface for treatment. Research is not restricted to the U.S.A. and South Africa, Associated Minerals Consolidated maintains a chemical products division in Australia currently engaged in improving the production of rare earths from monazite and developing derivatives from zircon. In London, Gold Fields has undertaken a series of complex research projects utilising the services of a computer to formulate long range forecasts using economic models. In view of rising costs the company firmly believes it essential that every effort be made, by means of research, to increase efficiency in the mining industry.



the crucial business of export financing where it provides a highly specialised service to bring British exporters and foreign importers together. One of its activities is the provision of finance on a substantial scale for the export of Ford vehicles from the United Kingdom. It has also recently arranged a £10 million facility for British exports to the Phillippines. Tennant's many other interests include insurance broking at Lloyds, Ingersoll Locks which produces high quality security devices, and a 50% interest in a mine in Argyll producing high grade silica sand used extensively in the glass industry. installation contract.

Metal fabrication being carried out at Buell's, Lebanon, Pa. plant for a cyclone

selling agent, the services of which are used by a number of Group companies. Its business also covers exports of British merchandise and the marketing of chemicals, metals and alloys. Tennant Guaranty is engaged in

classifying systems. All these are the result of many years of research and development to attain the most efficient methods of controlling industrial dust and fumes to overcome air pollution. Ambuco, a Group subsidiary in England, specialises in a similar field, but has extended its range to include industrial drying and cooling equipment.

Alumasc is the largest producer of low-pressure aluminium die-castings in Great Britain and has established a position as one of the principal suppliers of aluminium beer barrels to the brewing industry. Near Birmingham, Musgrove & Green is engaged in sheet metal fabrication and Metalion in north London specialises in all types of metal finishing processes. The Tennant group of companies, with its head office in the City of London, joined Gold Fields in 1963. Tennant Trading is a major European

#### Investment

The Group's portfolio of quoted investments has a current market value of some £200 million. In addition, its unquoted investments are valued at £8 million. The world-wide investments of the parent and its subsidiary companies are primarily in mining, financial and industrial undertakings. In supervising these widespread interests, the management staff is assisted by specialist departments using the most modern techniques of investment valuation and forecasting. A substantial portion of Gold Fields' quoted investments is represented by policy holdings in various companies which it administers, but a large part was acquired with a view to making profits thereon and is regarded as available for active trading. As this share dealing which is conducted on markets throughout the world forms part of Gold Fields' normal business, investment and share valuation departments are maintained in London and the Group's overseas offices. Profits derived from these operations in recent years have ranged from £2 m. to £.4 m.

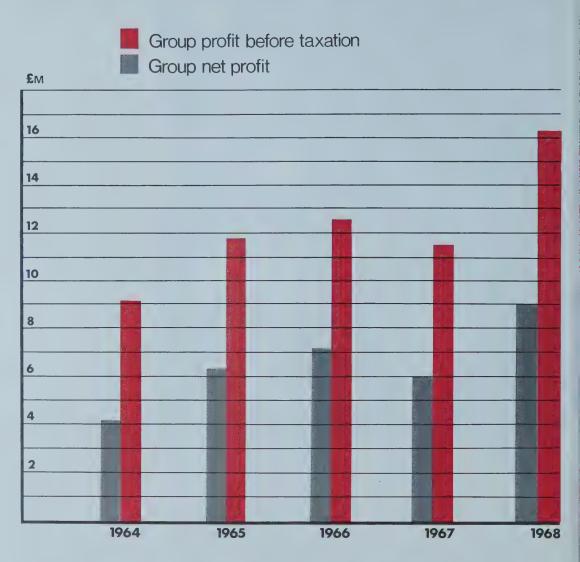
#### **Group Production**

Current annual output of principal metals and minerals by Group subsidiaries and companies it administers. (In long tons unless otherwise stated)

GOLD	5,600,000 ounces
*PLATINUM	750,000 ounces
COPPER	15,000 tons
DIAMONDS	60,000 carats
VANADIUM,	1,200 short tons
LEAD	5,000 short tons
*IRON ORE	4,500,000 tons
COAL	2,000,000 tons
TEN	
(in concentrates)	3,000 tons
SILVER	600,000 ounces
MINERAL SANDS	00.000
Rutile Zircon	90,000 tons 85,000 tons
Monazite	500 tons
ZINC	
Slab and Alloys	130,000 short tons
Oxides In concentrates	40,000 short tons 18,000 short tons
m concentrates	10,000 31011 (01)
SULPHUR	00 000 .
Pyrites Sulphuric Acid	20,000 tons 150,000 short tons
-	100,000 311011 10113
PHOSPHATES	65 000 about
(phosphate rock)	65,000 short ton

20,000,000 short tons

#### Profit 1964-1968



AGGREGATES (Sand, Gravel and Crushed Stone)

<sup>\*</sup> Produced by non-administered companies in which the Group has substantial interests.

## Principal Subsidiary Companies and Principal Group Interests in which the equity interest exceeds 10° $I_0$

	Location	Company	Principal Activities	Combined Interest of Parent and Subsidiaries	Group Beneficial interest in equity
Gold	South Africa South Africa South Africa South Africa	Doornfontein Gold Mining Co. Ltd. East Driefontein Gold Mining Co. Ltd. Kloof Gold Mining Co. Ltd. Luipaards Vlei Estate and Gold Mining	Mining Mining Mining	12 19 13	12 19 13
	South Africa South Africa South Africa South Africa South Africa Australia	Co. Ltd. Spaarwater Gold Mining Co. Ltd. Sub Nigel Ltd. Vlakfontein Gold Mining Co. Ltd. Vogelstruisbult Gold Mining Areas Ltd. West Driefontein Gold Mining Co. Ltd. Lake View & Star Ltd.	Mining Mining Mining Mining Mining Mining Mining	11 11 11 11 20 13 16	11 11 11 11 18 13 12
Platinum	South Africa South Africa	Union Platinum Mining Co. Ltd. Waterval (Rustenburg) Platinum	Holding Company	12	11
	oodiii Airea	Mining Co. Ltd.	Holding Company	46	46
Copper	Australia	Mount Lyell Mining and Railway Co. Ltd.	Mining and Smelting	60	46
Diamonds	South Africa South Africa	Selected Mining Holdings Ltd. Star Diamonds (Pty.) Ltd.	Holding Company Mining	64 100	35 35
Vanadium	South Africa	South West Africa Co. Ltd.	Mining	40	40
Iron Ore	Australia	Goldsworthy Mining Ltd.*	Mining	33	25
Coal	South Africa South Africa Australia	Apex Mines Ltd. Vierfontein Colliery Ltd.* Bellambi Coal Co. Ltd.	Mining Mining Mining	35 14 69	33 14 51
Uranium †	South Africa South Africa	Doornfontein Gold Mining Co. Ltd. Luipaards Vlei Estate and Gold Mining	Mining	12	12
	South Africa	Co. Ltd. West Driefontein Gold Mining Co. Ltd.	Mining Mining	11 13	11 13
Tin	South Africa South Africa Australia	Rooiberg Minerals Development Co. Ltd. Union Tin Mines Ltd. Renison Ltd.	Mining Mining Mining	23 29 64	22 9 34
Silver	South Africa Australia Australia	Gold Mining companies listed above Lake View and Star Ltd. Mount Lyell Mining & Railway Co. Ltd.	Mining Mining Mining and Smelting	16 60	12 46

	Location	Company	Principal Activities	Interest of Parent and Subsidiaries	Beneficial interest in equity
Rutile	Australia	Associated Minerals Consolidated Ltd.	Mining	66	48
Zircon	Australia	Associated Minerals Consolidated Ltd.	Mining	66	48
Zinc	South Africa South Africa South Africa U.S.A.	Kiln Products Ltd. South West Africa Co. Ltd. Zinc Corporation of South Africa Ltd. American Zinc Co.	Production of Oxides Mining Smelting Mining and Smelting	51 40 43 60	39 40 29 60
Sulphuric Acid	South Africa Australia U.S.A.	Zinc Corporation of South Africa Ltd. Mount Lyell Mining and Railway Co. Ltd. American Zinc Co.	Smelting Mining and Smelting Mining and Smelting	43 60 60	29 46 60
Phosphates	South Africa	Glenover Phosphate Ltd.	Mining	100	100
Aggregates	South Africa United Kingdom	South African Quarry Industries* Amalgamated Roadstone Corporation Ltd,	Lime and Gravel Quarrying Aggregates, Concrete,	17	13
	United Kingdom United Kingdom U.S.A. U.S.A.	St. Ives Quarries Ltd. St. Ives Sand and Gravel Co. Ltd. American Limestone Co. American Zinc Co.	Macadam and Shipping Aggregates and Concrete Aggregates and Concrete Aggregates and Concrete Aggregates	100 100 100 60	100 100 60 60
Exploration	Australia Canada Canada	New Consolidated Gold Fields (Australasia) Pty. Ltd. Newconex Canadian Exploration Ltd. Pyramid Mining Co. Ltd.*		100 100 11	76 100 7
Industrial, Property and Marketing Companies	South Africa Canada  New Zeland Norway United Kingdom	G. F. Diamond Drilling and Development Co. (Pty) Ltd. G.F. Industrial Holdings Co. Ltd. G.F. Industrial Property Co. (Pty). Ltd. Hunslet Taylor Consolidated (Pty) Ltd.  New Durban Gold and Industrials Ltd. Rubber and Wheel Industries (Pty.) Ltd. Taycent Engineering Co. (Pty) Ltd. Eimco (South Africa) (Pty). Ltd. Pacific Truck and Trailer Manufacturing Ltd. Zip Holdings Ltd. A/S Bjolvefossen* Alumasc Ltd. Ambuco Ltd. Greenwoods Transport Ltd. Metalion Ltd. Mining and Metallurgical Agency Ltd. Musgrove and Green Ltd. Tennant Guaranty Ltd. Tennant Trading Ltd. Tennant, Budd and Roderick Pratt Ltd. Buell Engineering Co. Inc.	Diamond Drill Bits Holding Company Property Company Locomotives, mining equipment Property Company Moulded Rubber Components Light Engineering Marketing and general agency  Trucks for Lumber Industry Domestic Hardware Ferro-alloys Low pressure die-casting Dust and fume control plant General haulage Metal finishing processes Marketing and general agency Metal Fabrication Export Finance Trading and general agency Insurance Dust and fume control plant	100 100 100 90 84 75 100 55 75 51 27 98 100 100 100 50 85 100	84 87 77 78 73 65 87 48 45 39 27 98 100 100 50 85 100 100 50

Combined

Group

	Location	Company	Principal Activities	Interest of Parent and Subsidiaries	Beneficial interest in equity
	South Africa	Anglo Rand Mining and Finance			
		Corporation Ltd.	Mining Finance	59	32
nt	South Africa	Beatrice Gold Mining Co. Ltd.	Mining Finance	61	27
	South Africa	Gold Fields of South Africa Ltd.	Finance and Management	100	100
	South Africa	Lydenburg Gold Farms Co. Ltd.	Mining Finance	46	26
	South Africa	New Witwatersrand Gold Exploration Co.			
		Ltd.	Mining Finance	55	55
	South Africa	West Witwatersrand Areas Ltd.	Mining Investment	42	42
	Australia	Commonwealth Mining Investments			
		(Australia) Ltd	Mining Finance	60	46
	Australia	Consolidated Gold Fields Australia Ltd.	Finance and Management	76	76
	Canada	Newconex Holdings Ltd.	Finance and Management	60	60
	United Kingdom	Anglo-French Exploration Co. Ltd.	Investment	100	100
	United Kingdom	British-Borneo Petroleum Syndicate Ltd.*	Holding and Finance	12	12
	United Kingdom	Greenwoods (St. Ives) Ltd.	Holding and Finance	100	100
	United Kingdom	Gold Fields Industrial Holdings Ltd.	Holding and Finance	100	100
	United Kingdom	Gold Fields Mining & Industrial Ltd.	Finance and Management	100	100
	United Kingdom	C. Tennant, Sons & Co. Ltd.	Holding and Finance	100	100
	U.S.A.	Gold Fields American Corporation	Management	100	100
	0,0,,,	Gold Flords / Illionosii Golporation			100

Notes: West Witwatersrand Areas Ltd. and its subsidiaries have substantial holdings in many of the Group's South African interests. Such holdings, which are not reflected in the above figures, include interests of 33% in Kloof Gold Mining Co. Ltd., 32% in East Driefontein Gold Mining Co. Ltd., 27% in Libanon Gold Mining Co. Ltd., 21% in Venterspost Gold Mining Co. Ltd., 20% in West Driefontein Gold Mining Co. Ltd., and 19% in Doornfontein Gold Mining Co. Ltd.

In the case of subsidiary companies listed, the Group interest percentages represent the proportion of the profits of each company which is attributable to the shareholders of Consolidated Gold Fields Limited.

Finance, Management and Investmen Companies Combined

Group

<sup>\*</sup>All the above companies are administered by the Group except those marked with an asterisk.

<sup>†</sup>Not being produced at time of publication.

<sup>§</sup>At the time of printing the takeover was still in course of completion.

#### **Directors**

Chairman

Sir George Harvie-Watt, Bart., T.D., D.L., Q.C.

Joint Deputy Chairmen

G. G. Potier, D.F.C.

J. D. McCall

W. J. Busschau

F. R. Cottell

Sir Charles Denman, Bart., M.C.

The Rt. Hon. Lord Erroll of Hale, P.C.

A. Louw

H. A. Mackay

M. Maclachlan

J. B. Massy-Greene

G. J. Mortimer, M.B.E.

M. E. Rich

W. Mason Smith

Sir Richard Snedden, C.V.O., C.B.E.

A. R. O. Williams, O.B.E.

R. A. Young

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Suite 4003, Toronto-Dominion Centre, Toronto 1.

President: W. A. Robinson, D.S.O.

South Africa Gold Fields of South Africa Limited,

75 Fox Street, Johannesburg.

Chairman: A. Louw

United States of America Gold Fields American Corporation,

Bankers Trust Building, 280 Park Avenue, New York 17.

President and Chief Executive Officer: J. H. Nicholls

